CMT-BX1/BX3/BX5BT

SERVICE MANUAL

Ver. 1.2 2007.08

US Model
CMT-BX1/BX5BT
Canadian Model
CMT-BX3/BX5BT
AEP Model
UK Model
E Model
Australian model
CMT-BX3

- CMT-BX1/BX3/BX5BT are composed of following models. As service manuals are issued for each component model, please refer to them.

COMPONENT MODEL NAME

	CMT-BX1	CMT-BX3	CMT-BX5BT
Compact Disc Receiver	HCD-CBX1	HCD-CBX3	HCD-BX5BT
Speaker System	SS-CBX1	SS-CBX3	SS-CBX5

SPECIFICATIONS

Power requirements
120 V AC, 60 Hz (BX1/BX3: Canadian model/BX5BT)
230 V AC, 50/60 Hz (BX3: European model)
230 – 240 V AC, 50/60 Hz (BX3: Australian model)
220 V AC, 60 Hz (BX3: Korean model)
120 V AC, 50/60 Hz (BX3: Taiwan model)
120 V 220 V 230 – 240 V AC, 50/60 Hz adjustable with voltage selector (BX3: Other models)
Power consumption:
40 watts (BX5BT/BX1)
65 watts (BX3)
Dimensions (w/h/d) (excl. speakers):
Approx. 200 × 132 × 298 mm
Mass (excl. speakers):
CMT-BX1: 3.4 kg
CMT-BX3: 3.7 kg
CMT-BX5BT: 3.5 kg
Supplied accessories: Remote Commander (1), R6 (Size AA) batteries (2), AM loop antenna (1), FM lead antenna (1)

Design and specifications are subject to change without notice.

ACCESSORIES

Part No.	Description	Remark
1-754-102-31	ANTENNA, LOOP (LW.MW) (AM loop antenna)	
1-754-243-11	ANTENNA (FM lead antenna)	
2-055-382-01	LID, BATTERY CASE (for RM-SC31/SCU37)	
3-095-504-12	MANUAL, INSTRUCTION (ENGLISH) (BX1)	
3-095-504-21	MANUAL, INSTRUCTION (ENGLISH)	(BX3: CND, AEP, UK, SP, TW, AUS)
3-095-504-31	MANUAL, INSTRUCTION (FRENCH) (BX3: CND, AEP, SP)	
3-095-504-41	MANUAL, INSTRUCTION (SPANISH) (BX3: AEP, SP)	
3-095-504-51	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN)	(BX3: AEP)
3-095-504-61	MANUAL, INSTRUCTION (SWEDISH, POLISH) (BX3: AEP)	
3-095-504-72	MANUAL, INSTRUCTION (TRADITIONAL CHINESE)	(BX3: SP, TW)
3-095-504-81	MANUAL, INSTRUCTION (KOREAN) (BX3: KR)	
3-095-507-12	MANUAL, INSTRUCTION (ENGLISH) (BX5BT)	
3-095-507-21	MANUAL, INSTRUCTION (FRENCH) (BX5BT: CND)	
A-1237-274-A	RM-SC31 (Remote Commander)	(including battery case lid) (BX1/BX5BT)
A-1237-275-A	RM-SCU37 (Remote Commander)	(including battery case lid) (BX3)

- Abbreviation
  AUS : Australian model
  CND : Canadian model
  KR : Korean model
  SP : Singapore model
  TW : Taiwan model

MICRO HI-FI COMPONENT SYSTEM

9-887-615-03
2007H05-1
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Personal Audio Division
Published by Sony Techno Create Corporation

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REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the top of the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2007.03	New
1.1	2007.06	Addition of Canadian, Singapore, Taiwan, Korean and Australian models (CMT-BX3)
1.2	2007.08	Addition of Canadian model (CMT-BX5BT)

HCD-BX5BT/CBX1/CBX3

SERVICE MANUAL

Ver. 1.3 2007.06

US Model
HCD-BX5BT/CBX1
Canadian Model
AEP Model
UK Model
E Model
Australian Model
HCD-CBX3

- HCD-BX5BT is the amplifier, bluetooth, CD player and tuner section in CMT-BX5BT.
- HCD-CBX1 is the amplifier, CD player and tuner section in CMT-BX1
- HCD-CBX3 is the amplifier, USB, CD player and tuner section in CMT-BX3.

Photo: HCD-BX5BT

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Model Name Using Similar Mechanism		NEW
Base Unit Name	HCD-BX5BT/CBX1	BU-K6BD90-WOD
	HCD-CBX3	BU-K6BD90U-WOD
Optical Pick-up Block Name		KSM-213DCP

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS POWER OUTPUT AND TOTAL HARMONIC DISTORTION (BX5BT/CBX1):
With 6 ohm loads, both channels driven, from 120 – 10,000Hz; rated 12 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

BX5BT/CBX1:
Continuous RMS power output (reference): 15 + 15 watts (6 ohms at 1 kHz, 10% THD)
Inputs:
AUDIO IN (stereo mini jack): voltage 250 mV, impedance 47 kilohms
Outputs:
PHONES (stereo mini jack): accepts he/adphones of 8 ohms or more
SPEAKER: accepts impedance of 6 to 16 ohms
CBX3:
Canadian model:
DIN power output (rated): 18 + 18 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 25 + 25 watts (6 ohms at 1 kHz, 10% THD)
European model:
DIN power output (rated): 18 + 18 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output(reference): 25 + 25 watts (6 ohms at 1 kHz, 10% THD)
Music power output (reference): 38 + 38 watts (6 ohms at 1 kHz, 10% THD)
Other models:
DIN power output (rated): 18 + 18 watts (6 ohms at 1 kHz, DIN)
Continuous RMS power output(reference): 25 + 25 watts (6 ohms at 1 kHz, 10% THD)
Inputs:
AUDIO IN (stereo mini jack): voltage 250 mV, impedance 47 kilohms
(USB) port: Type A, maximum current 500 mA
Outputs:
PHONES (stereo mini jack): accepts headphones of 8 ohms or more
SPEAKER: accepts impedance of 6 to 16 ohms

Bluetooth section (BX5BT)

Communication system:
Bluetooth Standard version 2.0
Output:
Bluetooth Standard Power Class 2
Maximum communication range:
Line of sight approx. 10 m[1)]
Frequency band:
2.4 GHz band (2.4000 GHz – 2.4835 GHz)
Modulation method:
FHSS
Compatible Bluetooth profiles[2)]:
A2DP (Advanced Audio Distribution Profile)
AVRCP (Audio Video Remote Control Profile)
Supported codecs:
Receive: SBC (Sub Band Codec), MP3
Transmit: SBC (Sub Band Codec)

1) The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, reception sensitivity, antenna's performance, operating system, software application, etc.
2) Bluetooth standard profiles indicate the purpose of Bluetooth communication between devices.

USB section (CBX3)

Supported bit rate
MP3 (MPEG 1 Audio Layer-3): 32 – 320 kbps, VBR
ATRAC: 48 – 352 kbps (ATRAC3plus), 66/105/132 kbps (ATRAC3)
WMA: 32 – 192 kbps, VBR
AAC: 48 – 320 kbps
Sampling frequencies
MP3 (MPEG 1 Audio Layer-3): 32/44.1/48 kHz
ATRAC: 44.1 kHz
WMA: 44.1 kHz
AAC: 44.1 kHz

CD player section

System: Compact disc and digital audio system

– Continued on next page –

COMPACT DISC RECEIVER

9-887-614-04
2007F05-1
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Laser Diode Properties
Emission duration: continuous
Laser Output*: Less than 44.6μ W
* This output is the value measurement at a distance of 200mm from the objective lens surface on the Optical Pick-up Block with 7mm aperture.
Frequency response: 20 Hz – 20 kHz
Signal-to-noise ratio: More than 90 dB
Dynamic range: More than 90 dB

Tuner section
BX5BT/CBX1:
FM stereo, FM/AM superheterodyne tuner

FM tuner section:
Tuning range:
Canadian model:
87.5 – 108.0 MHz (100 kHz step)
Other models:
87.5 – 108.0 MHz (50 kHz step)
Antenna: FM lead antenna
Antenna terminals: 75 ohms unbalanced
Intermediate frequency: 10.7 MHz
AM tuner section:
Tuning range:
Canadian model:
530 – 1,710 kHz (with 10 kHz tuning interval)
531 – 1,710 kHz (with 9 kHz tuning interval)
European model:
531 – 1,602 kHz (with 9 kHz tuning interval)
Other models:
530 – 1,710 kHz (with 10 kHz tuning interval)
531 – 1,602 kHz (with 9 kHz tuning interval)
Antenna: AM loop antenna, external antenna terminal
Intermediate frequency: 450 kHz

CBX3:
FM stereo, FM/AM superheterodyne tuner

FM tuner section:
Tuning range
87.5 – 108.0 MHz (50 kHz step)
Antenna: FM lead antenna
Antenna terminals: 75 ohms unbalanced
Intermediate frequency: 10.7 MHz
AM tuner section:
Tuning range
531 – 1,602 kHz (with 9 kHz tuning interval)
Antenna: AM loop antenna, external antenna terminal
Intermediate frequency: 450 kHz

General
Power requirements:
120 V AC, 60 Hz (BX5BT/CBX1)
120 V AC, 60 Hz (CBX3: Canadian model)
230 V AC, 50/60 Hz (CBX3: European model)
230 – 240 V AC, 50/60 Hz (CBX3: Australian model)
220 V AC, 60 Hz (CBX3: Korean model)
120 V AC, 50/60 Hz (CBX3: Taiwan model)
120 V, 220 V, 230 V – 240 V AC, 50/60 Hz, adjustable with voltage selector (CBX3: Other models)
Power consumption:
40 watts (BX5BT/CBX1)
65 watts (CBX3)
Dimensions (w/h/d) (excl. speakers):
Approx. 200 × 132 × 298 mm
Mass (excl. speakers):
3.5 kg (BX5BT)
3.4 kg (CBX1)
3.7 kg (CBX3)

Design and specifications are subject to change without notice.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

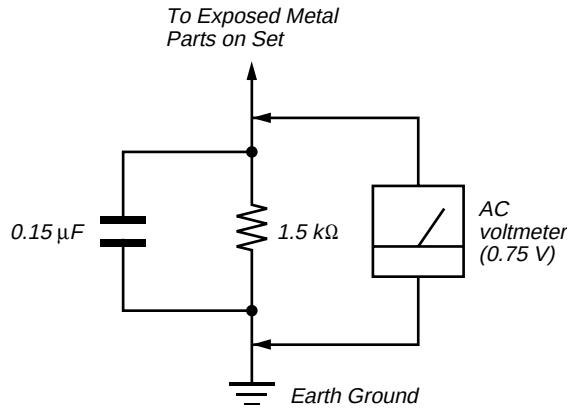

Fig. A. Using an AC voltmeter to check AC leakage.

Refer to SUPPLEMENT-3 for the VOLTAGE SELECTOR board of printed wiring board, schematic diagram and electrical parts list of HCD-CBX3: Singapore model.

Refer to SUPPLEMENT-3 for the POWER board of printed wiring board, schematic diagram and electrical parts list of HCD-CBX3: Singapore model.
When repairing the set of except HCD-CBX3: Singapore model, refer to either of original service manual/SUPPLEMENT-1 according to the set.

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SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 ˚C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 ˚C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

ANTITHEFT UNLOCK MODE

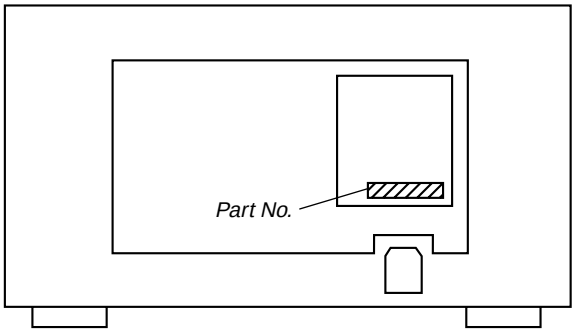
Procedure:

1. Press the I/⏻ button to turn the power on.
2. Press the FUNCTION button to select “CD” (BX5BT/CBX1). Press the CD button on the remote commander to select “CD” (CBX3).
3. Press two buttons of ■/CANCEL and ⏏ for 5 seconds.
4. The message “UNLOCKED” is displayed on the liquid crystal display and the disc tray is unlocked.

Note: When “LOCKED” is displayed, the tray lock is not released by turning power on/off with the I/⏻ button.

MODEL IDENTIFICATION

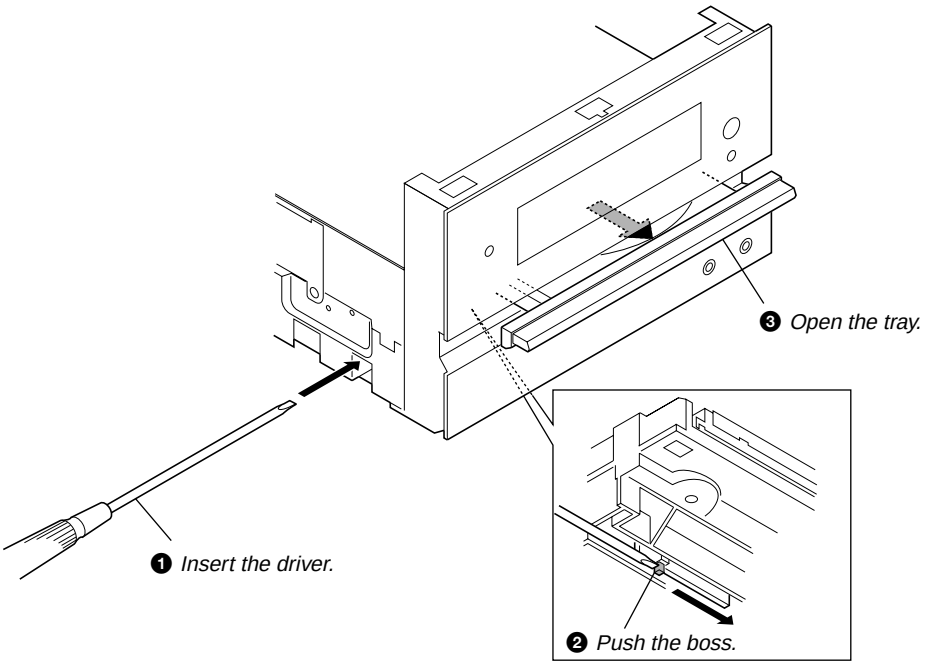
– Rear View –



Model Name	Part No.
HCD-CBX1	3-100-164-0□
HCD-CBX3: Canadian model	3-106-894-0□
HCD-CBX3: AEP and UK models	3-106-895-0□
HCD-CBX3: Singapore model	3-106-896-0□
HCD-CBX3: Australian model	3-106-897-0□
HCD-CBX3: Korean model	3-106-898-0□
HCD-CBX3: Taiwan model	3-106-900-0□
HCD-BX5BT	3-106-906-0□

HOW TO OPEN THE TRAY WHEN POWER SWITCH TURN OFF

Note: Please insert a screwdriver after removing a BT board about about HCD-BX5BT.
About disassembly of a BT board, please refer to “3-5. BT board (BX5BT only)” (page 13).



SECTION 2
GENERAL

This section is extracted from instruction manual.

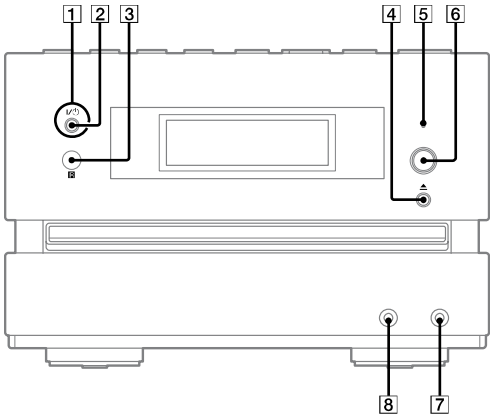
HCD-BX5BT:

Guide to parts and controls

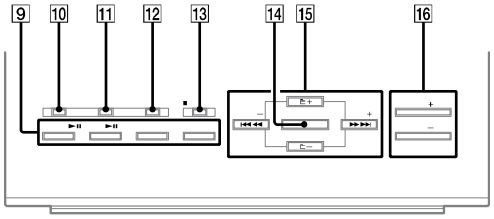
This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the unit having the same or similar names.

Unit (HCD-BX5BT/Compact Disc Receiver)

Front panel



Top panel



Remote: ► (play) button,
❚❚ (pause) button
Press to start or pause playback.

TUNER/BAND button
Press to select the TUNER function.
Press to select FM or AM reception mode.

Remote: AUDIO IN button
Press to select the AUDIO IN function.

FUNCTION button
Press to select the function.

10
DISPLAY button
Press to change the information on the display.

11
PLAY MODE/TUNING MODE button
Press to select the play mode of a CD or MP3 disc.
Press to select the tuning mode.

12
Sound buttons
Unit: DSGX button
Remote: EQ button
Press to select the sound effect.

13
Unit: ■/CANCEL (stop/cancel) button
Remote: ■ (stop) button
Press to stop playback.

14
ENTER button
Press to enter the settings.

15
I◄◄/►►I (go back/go forward) button
Press to select a track or file.

Unit: TUNE +/– (tuning) button
Remote: +/– (tuning) button
Press to tune in the desired station.

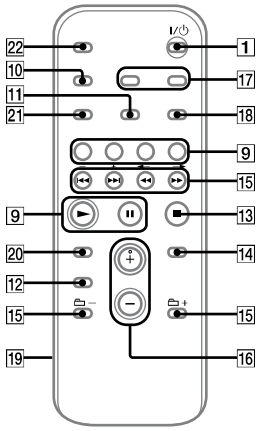
🗀 +/– (select folder) button
Press to select a folder.

◄◄/►► (rewind/fast forward) button
Press to find a point in a track or file.

16
Unit: VOL +/– button
Remote: VOLUME +/– button
Press to adjust the volume.

17
CLOCK/TIMER SELECT button
CLOCK/TIMER SET button
Press to set the clock and the Play Timer.

Remote (RM-SC31)



1
I/⏻ (power) button
Press to turn on the system.

2
STANDBY indicator
Lights up when the system is turned off.

3
Remote sensor

4
⏏ (open/close) button
Press to open or close the disc tray.

5
BLUETOOTH indicator
Lights up when the Bluetooth function is active.

6
BLUETOOTH OPR button
Press to make a connection, disconnection, or pairing with a Bluetooth device.

7
AUDIO IN jack
Connect to an optional audio component.

8
PHONES jack
Connect the headphones.

9
Playback buttons and function buttons
Unit: BLUETOOTH ►❚❚ (play/pause) button
Press to select the Bluetooth function.
Press to start or pause playback of the music on the Bluetooth device (Bluetooth mobile phone, etc.).

Unit: CD ►❚❚ (play/pause) button
Press to select the CD function.
Press to start or pause playback of a disc.
Remote: CD button
Press to select the CD function.

18
REPEAT/FM MODE button
Press to listen to a disc, a single track or file repeatedly.
Press to select the FM reception mode (monaural or stereo).

19
Battery compartment lid

20
CLEAR button
Press to delete a pre-programmed track or file.
Press to erase the pairing registration information of the Bluetooth device.

21
TUNER MEMORY button
Press to preset the radio station.

22
SLEEP button
Press to set the Sleep Timer.

Setting the clock

Use buttons on the remote to set the clock.

1 Press I/⏻ 1 to turn on the system.

2 Press CLOCK/TIMER SET 17
If the current mode appears on the display, press I◄◄/►►I 15 repeatedly to select "CLOCK SET" and then press ENTER 14.

3 Press I◄◄/►►I 15 repeatedly to set the hour, and then press ENTER 14.

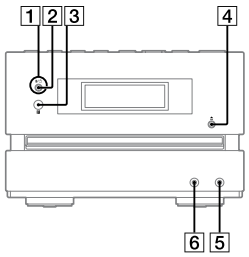
4 Use the same procedure to set the minutes.
The clock settings are lost when you disconnect the power cord or if a power failure occurs.

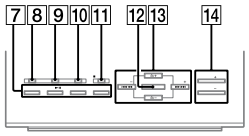
To display the clock when the system is off

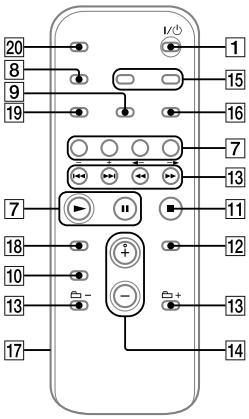
Press DISPLAY 10. The clock is displayed for about 8 seconds.

HCD-CBX1:

Basic Operations



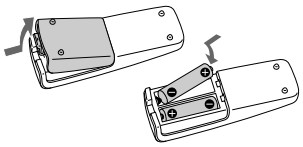




Before using the system

To use the remote

Slide and remove the battery compartment lid 17, and insert the two supplied R6 (size AA) batteries, ⊖ side first, matching the polarities shown below.



Notes on using the remote

- With normal use, the batteries should last for about six months.
- Do not mix an old battery with a new one or mix different types of batteries.
- If you do not use the remote for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.

To set the clock

1 Turn on the system.
Press I/⏻ (power) 1.

2 Select the clock set mode.
Press CLOCK/TIMER SET 15 on the remote. If the current mode appears on the display, press ⏮/⏭ 13 repeatedly to select "CLOCK SET" and then press ENTER 12.

3 Set the time.
Press ⏮/⏭ 13 repeatedly to set the hour, and then press ENTER 12. Use the same procedure to set the minutes.
The clock settings are lost when you disconnect the power cord or if a power failure occurs.
To display the clock when the system is off, press DISPLAY 8. The clock is displayed for about 8 seconds.

Selecting a music source

Press the following buttons (or press FUNCTION 7 repeatedly).

To select	Press
CD	CD 7 on the remote.
Tuner	TUNER/BAND 7.
Component (connected using an audio cord)	AUDIO IN 7.

Adjusting the sound

To adjust the volume

Press VOLUME +/— on the remote (or VOL +/— on the unit) 14.

To add a sound effect

To	Press
Generate a more dynamic sound (Dynamic Sound Generator X-tra)	DSGX 10 on the unit.
Set the sound effect	EQ 10 on the remote repeatedly to select "BASS" or "TREBLE," and then press +/— 13 on the remote repeatedly to adjust the level.

Playing a CD/MP3 disc

1 Select the CD function.
Press CD on the remote 7.

2 Place a disc.
Press ⏏ (open/close) 4 on the unit, and place a disc with the label side up on the disc tray.

To close the disc tray, press ⏏ (open/close) 4 on the unit.
Do not force the disc tray closed with your finger, as this may damage the unit.

3 Start playback.
Press ► (play) on the remote (or CD ►II (play/pause) on the unit) 7.

To	Press
Pause playback	II (pause) on the remote (or CD ►II (play/pause) on the unit) 7. To resume play, press the button again.
Stop playback	■ (stop) 11.
Select a folder on an MP3 disc	🗀 +/— (select folder) 13.
Select a track or file	⏮/⏭ (go back/go forward) 13.
Find a point in a track or file	Hold down ◀◀/▶▶ (rewind/fast forward) 13 during playback, and release the button at the desired point.
Select Repeat Play	REPEAT 16 on the remote repeatedly until "REP" or "REP1" appears.

To change the play mode

Press PLAY MODE 9 repeatedly while the player is stopped. You can select normal play ("🗀" for all MP3 files in the folder on the disc), shuffle play ("SHUF" or "🗀 SHUF*"), or program play ("PGM").

* When playing a CD-DA disc, 🗀 (SHUF) Play performs the same operation as normal (shuffle) play.

Notes on Repeat Play

- All tracks or files on a disc are played repeatedly up to five times.
- "REP1" indicates that a single track or file is repeated until you stop it.

Notes on playing MP3 discs

- Do not save other types of tracks or files or unnecessary folders on a disc that has MP3 files.
- Folders that have no MP3 files are skipped.
- MP3 files are played back in the order that they are recorded onto the disc.
- The system can only play MP3 files that have a file extension of ".MP3".
- If there are files on the disc that have the ".MP3" file extension, but that are not MP3 files, the unit may produce noise or may malfunction.
- The maximum number of:
  - —folders is 255 (including the root folder).
  - —MP3 files is 511.
  - —MP3 files and folders that can be contained on a single disc is 512.
  - —folder levels (the tree structure of files) is 8.
- Compatibility with all MP3 encoding/writing software, recording device, and recording media cannot be guaranteed. Incompatible MP3 discs may produce noise or interrupted audio or may not play at all.

Notes on playing multisession discs

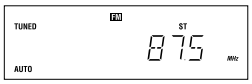
- If the disc begins with a CD-DA (or MP3) session, it is recognized as a CD-DA (or MP3) disc, and other sessions are not played back.
- A disc with a mixed CD format is recognized as a CD-DA (audio) disc.

Listening to the radio

1 Select "FM" or "AM."
Press TUNER/BAND 7 repeatedly.

2 Select the tuning mode.
Press TUNING MODE 9 repeatedly until "AUTO" appears.

3 Tune in the desired station.
Press +/— on the remote (or TUNE +/— on the unit) 13. Scanning stops automatically when a station is tuned in, and then "TUNED" and "ST" (for stereo programs only) appear.



To stop automatic scanning

Press ■ (stop) 11.

To tune in a station with a weak signal

If "TUNED" does not appear and the scanning does not stop, press TUNING MODE 9 repeatedly until "AUTO" and "PRESET" disappear, and then press +/— on the remote (or TUNE +/— on the unit) 13 repeatedly to tune in the desired station.

To reduce static noise on a weak FM stereo station

Press FM MODE 16 on the remote repeatedly until "MONO" appears to turn off stereo reception.

Changing the display

To	Press
Change information on the display[1]	DISPLAY 8 repeatedly when the system is on.
Check the clock when the system is off	DISPLAY 8 when the system is off[2]. The clock is displayed for 8 seconds.

[1] For example, you can view CD/MP3 disc information, such as the track or file number or folder name during normal play, or the total playing time while the player is stopped.
[2] The STANDBY indicator 2 on the unit lights up when the system is off.

Notes on the display information

- Characters that cannot be displayed appear as "_".
- The following are not displayed:
  - —total playing time for a CD-DA disc depending on the play mode.
  - —total playing time and remaining playing time for an MP3 disc.
- The following are not displayed correctly:
  - —folder and file names that do not follow either the ISO9660 Level 1, Level 2 or Joliet in the expansion format.
- The following is displayed:
  - —ID3 tag information for MP3 files when ID3 version 1 and version 2 tags are used (up to 62 characters).

Using optional audio components

To connect an optional headphones

Connect headphones to the PHONES jack 6 on the unit.

To connect an optional component

Connect additional audio component to the AUDIO IN jack 5 on the unit using an audio analog cord (not supplied). Turn down the volume on the system, and then select the AUDIO IN function.

Other Operations

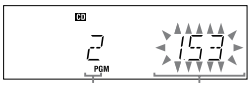
Creating your own program (Program Play)

1 Press CD [7] to select the CD function.

2 Press PLAY MODE [9] repeatedly until "PGM" appears while the player is stopped.

3 Press ⏮/⏭ [13] repeatedly until the desired track or file number appears.

When programming files, press 🗀 +/− [13] repeatedly to select the desired folder, and then select the desired file.



Selected track or file number

Total playing time of program (including selected track or file)

4 Press ENTER [12] to add the track or file to the program.

"– –.– –" appears when the total program time exceeds 100 minutes for a CD, or when you select a CD track whose number is 21 or over, or when you select an MP3 file.

5 Repeat steps 3 through 4 to program additional tracks or files, up to a total of 25 tracks or files.

6 To play your program of tracks or files, press ▶ [7].

The program remains available until you open the disc tray. To play the same program again, press ▶ [7].

To cancel Program Play

Press PLAY MODE [9] repeatedly until "PGM" disappears while the player is stopped.

To delete the last track or file of the program

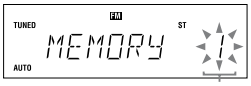
Press CLEAR [18] on the remote while the player is stopped.

Presetting radio stations

You can preset your favorite radio stations and tune them in instantly by selecting the corresponding preset number.
Use buttons on the remote to preset stations.

1 Tune in the desired station (See "Listening to the radio").

2 Press TUNER MEMORY [19].



Preset number

3 Press +/− [13] repeatedly to select your desired preset number.

If another station is already assigned to the selected preset number, the station is replaced by the new stations.

4 Press ENTER [12].

5 Repeat steps 1 through 4 to store other stations.

You can preset up to 20 FM and 10 AM stations. The preset stations are retained for about half a day even if you disconnect the power cord or if a power failure occurs.

6 To call up a preset radio station, press TUNING MODE [9] repeatedly until "PRESET" appears, and then press +/− [13] repeatedly to select the desired preset number.

Using the Timers

The system offers two timer functions. If you use the Play Timer with the Sleep Timer, the Sleep Timer has priority.

Sleep Timer:

You can fall asleep to music. This function works even if the clock is not set.
Press SLEEP [20] repeatedly. If you select "AUTO," the system automatically turns off after the current disc stops or in 100 minutes.

Play Timer:

You can wake up to CD or tuner at a preset time.

Use buttons on the remote to control the Play Timer. Make sure you have set the clock.

1 Prepare the sound source.

Prepare the sound source, and then press VOLUME +/− [14] to adjust the volume.

To start from a specific track or file, create your own program.

2 Press CLOCK/TIMER SET [15].

3 Press ⏮/⏭ [13] repeatedly to select "PLAY SET," and then press ENTER [12].

"ON" appears, and the hour indication flashes.

4 Set the time to start playing.

Press ⏮/⏭ [13] repeatedly to set the hour, and then press ENTER [12].

The minute indication flashes. Use the procedure above to set the minutes.

5 Use the same procedure as in step 4 to set the time to stop playing.

6 Select the sound source.

Press ⏮/⏭ [13] repeatedly until the desired sound source appears, and then press ENTER [12]. The display shows the timer settings.

7 Press I/⏻ [1] to turn off the system.

The system turns on 15 seconds before the preset time. If the system is on at the preset time, the Play Timer will not play.

To activate or check the timer again

Press CLOCK/TIMER SELECT [15], press ⏮/⏭ [13] repeatedly until "PLAY SEL" appears, and then press ENTER [12].

To cancel the timer

Repeat the same procedure as above until "TIMER OFF" appears, and then press ENTER [12].

To change the setting

Start over from step 1.

Tip

The Play Timer setting remains as long as the setting is not canceled manually.

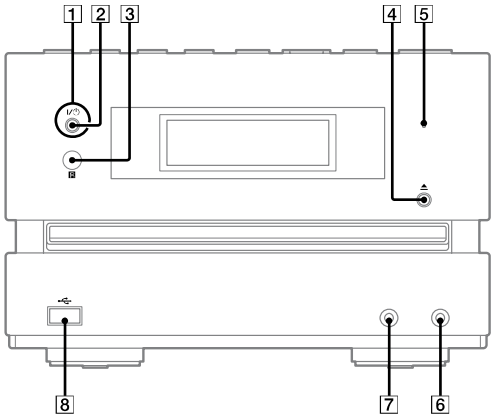
HCD-CBX3:

Guide to parts and controls

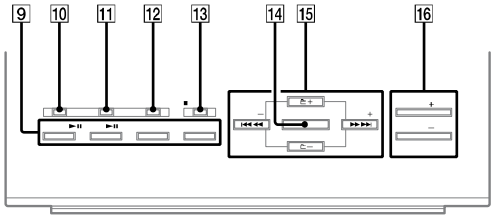
This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the unit having the same or similar names.

Unit

Front panel



Top panel



Remote: ► (play) button, ❚❚ (pause) button
Press to start or pause playback.

TUNER/BAND button
Press to select the TUNER function.
Press to select FM or AM reception mode.

Unit: AUDIO IN button
Press to select the AUDIO IN function.

Remote: FUNCTION button
Press to select the function.

10
DISPLAY button (page 17)
Press to change the information on the display.

11
PLAY MODE/TUNING MODE button
Press to select the play mode of a CD, MP3 disc or an optional USB device (Digital music player or USB storage media).
Press to select the tuning mode.

12
Sound buttons
Unit: DSGX button
Remote: EQ button
Press to select the sound effect.

13
Unit: ■/CANCEL (stop/cancel) button
Remote: ■ (stop) button
Press to stop playback.

14
ENTER button
Press to enter the settings.

15
I◄◄ /►►I (go back/go forward) button
Press to select a track or file.

Unit: TUNE +/– (tuning) button
Remote: +/– (tuning) button

Press to tune in the desired station.

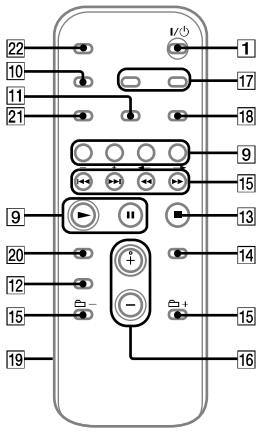
+/– (select folder) button
Press to select a folder.

◄◄/►► (rewind/fast forward) button
Press to nd a point in a track or file.

16
Unit: VOL +/– button Remote: VOLUME +/– button
Press to adjust the volume.

17
CLOCK/TIMER SELECT button
CLOCK/TIMER SET button
Press to set the clock and the Play Timer.

Remote



1
I/⏻ (power) button
Press to turn on the system.

2
STANDBY indicator
Lights up when the system is turned off.

3
Remote sensor

4
⏏ (open/close) button
Press to open or close the disc tray.

5
USB MEMORY indicator
Lights up when an optional USB device (Digital music player or USB storage media) is connected.

6
AUDIO IN jack
Connect to an optional audio component.

7
PHONES jack
Connect the headphones.

8
(USB) port
Connect to an optional USB device (Digital music player or USB storage media).

9
Playback buttons and function buttons
Unit: USB ►❚❚ (play/pause) button
Press to select the USB function.
Press to start or pause playback of an optional USB device (Digital music player or USB storage media).
Remote: USB button
Press to select the USB function.

Unit: CD ►❚❚ (play/pause) button
Press to select the CD function.
Press to start or pause playback of a disc.
Remote: CD button
Press to select the CD function.

18
REPEAT/FM MODE button
Press to listen to a disc, a single track or file repeatedly.
Press to select the FM reception mode (monaural or stereo).

19
Battery compartment lid

20
CLEAR button
Press to delete a pre-programmed track or file.

21
TUNER MEMORY button
Press to preset the radio station.

22
SLEEP button
Press to set the Sleep Timer.

Setting the clock

Use buttons on the remote to set the clock.

1 Press I/⏻ 1 to turn on the system.

2 Press CLOCK/TIMER SET 17
If the current mode appears on the display, press I◄◄ /►►I 15 repeatedly to select “CLOCK SET” and then press ENTER 14.

3 Press I◄◄ /►►I 15 repeatedly to set the hour, and then press ENTER 14.

4 Use the same procedure to set the minutes.
The clock settings are lost when you disconnect the power cord or if a power failure occurs.

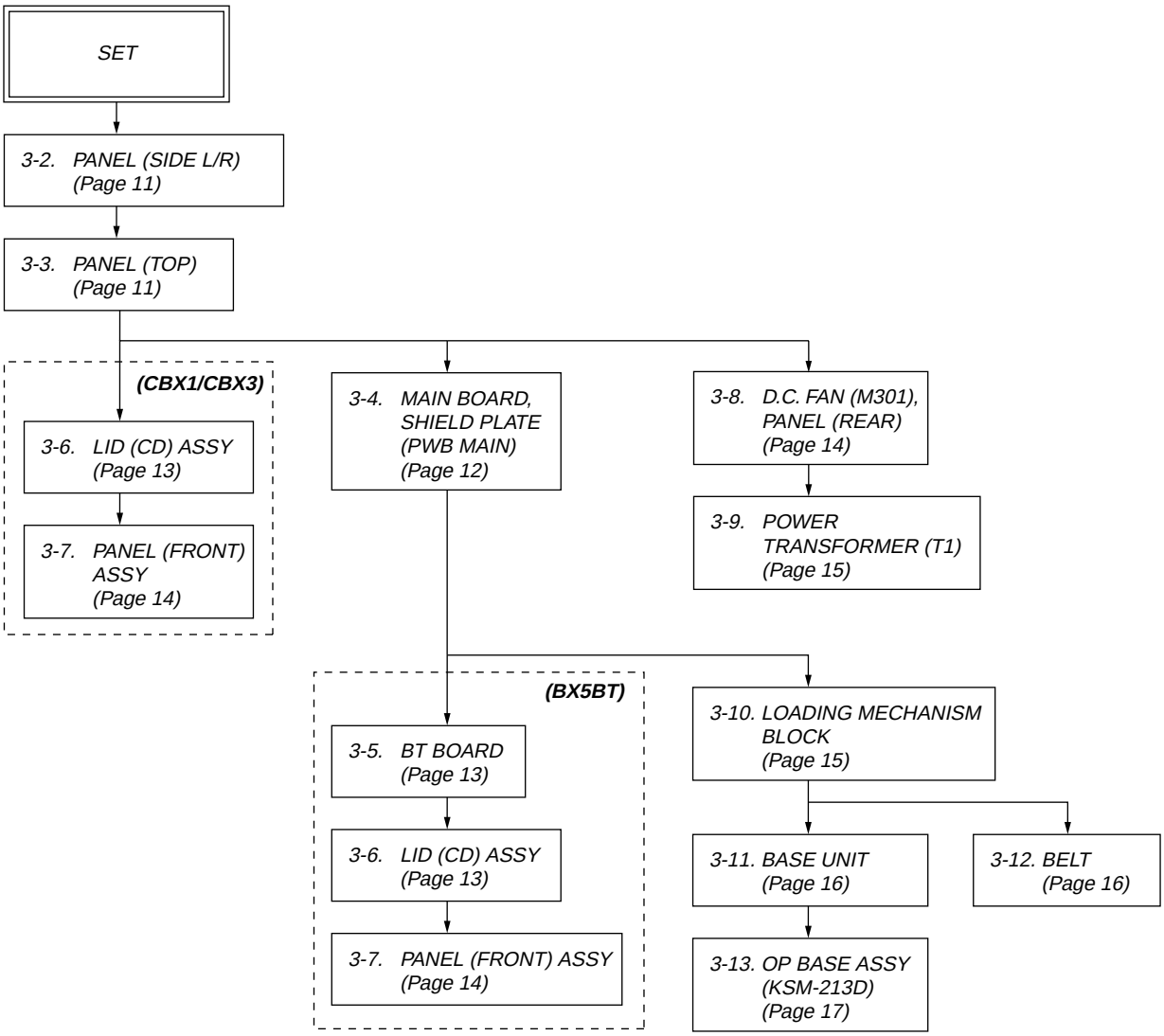
To display the clock when the system is off

Press DISPLAY 10. The clock is displayed for about 8 seconds.

SECTION 3
DISASSEMBLY

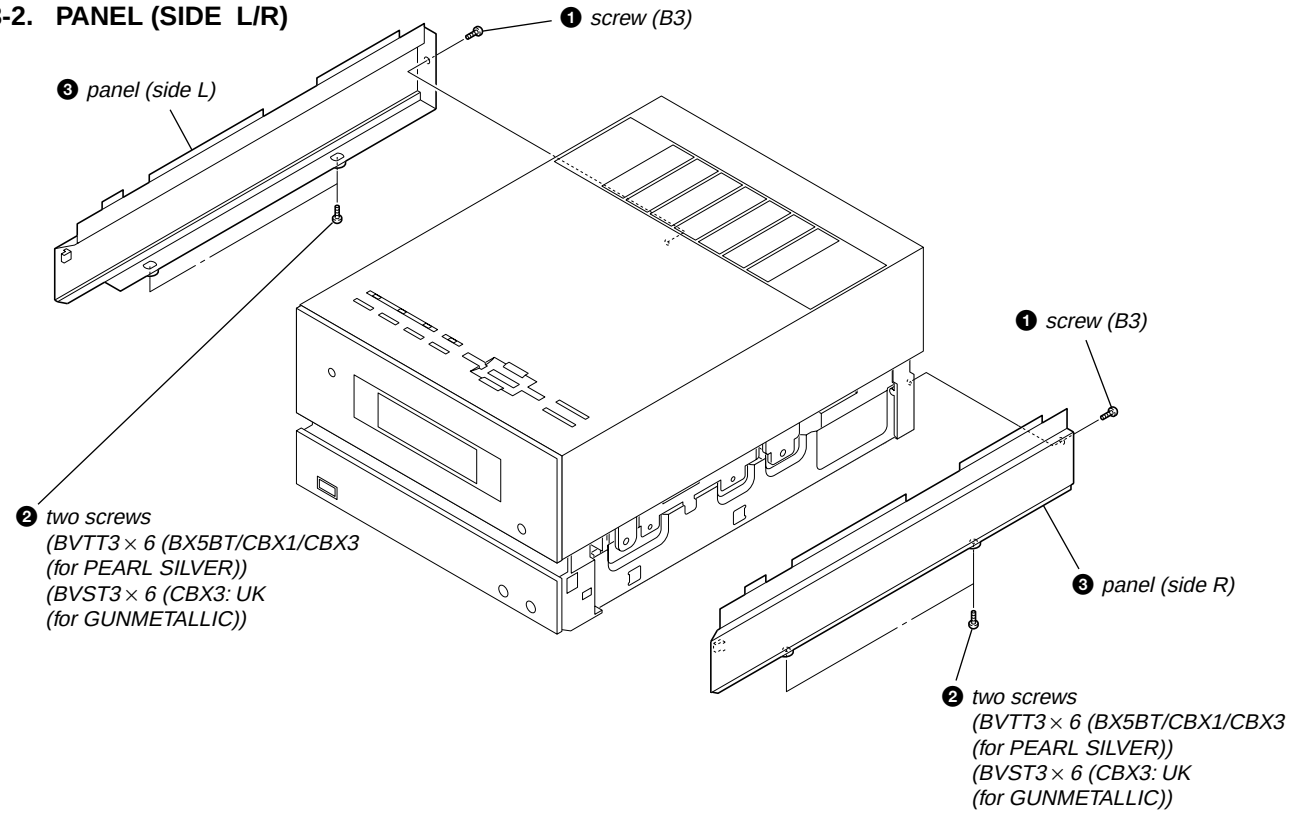
- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

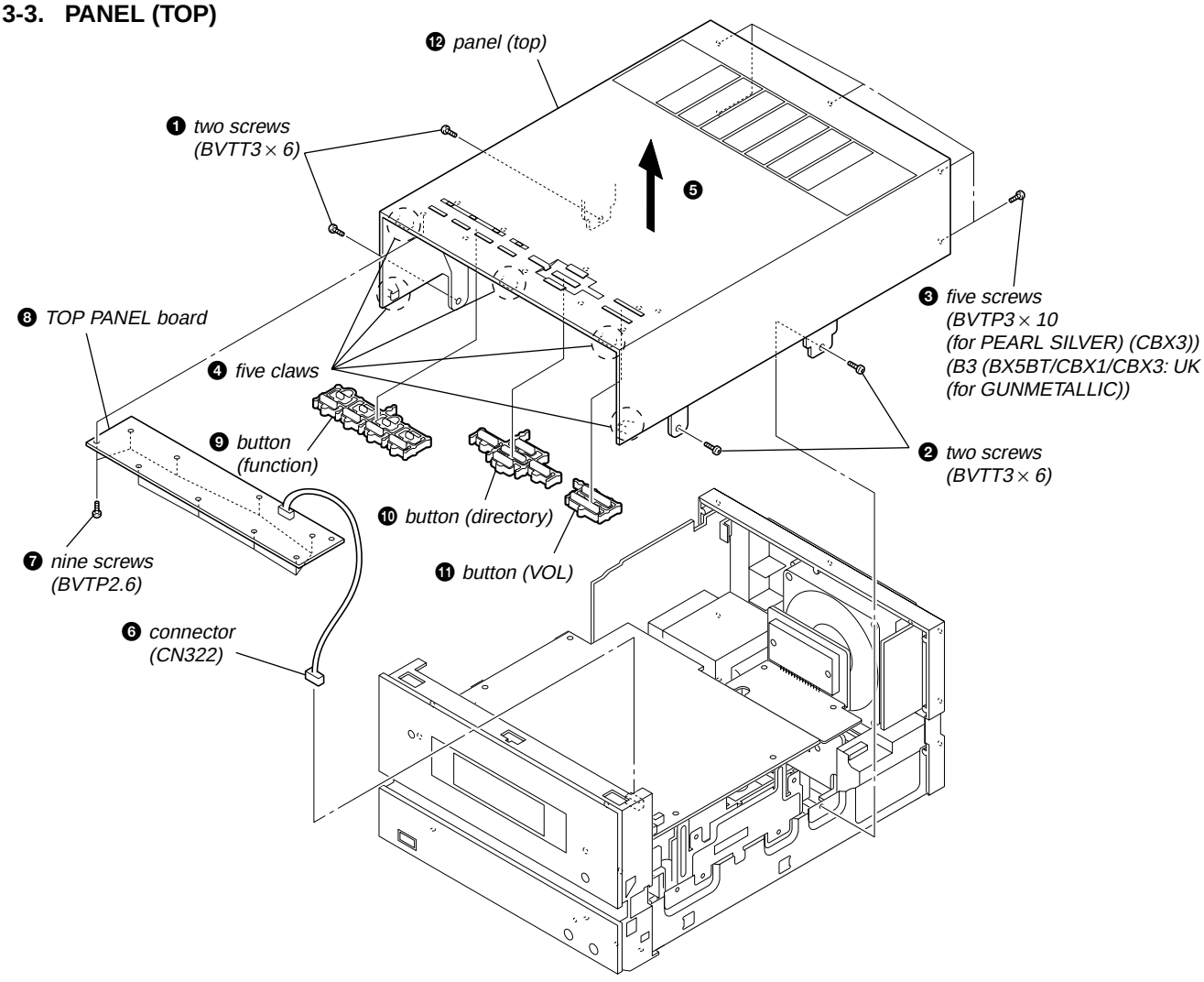

SET
3-2. PANEL (SIDE L/R) (Page 11)
3-3. PANEL (TOP) (Page 11)
(CBX1/CBX3)
3-6. LID (CD) ASSY (Page 13)
3-7. PANEL (FRONT) ASSY (Page 14)
3-4. MAIN BOARD, SHIELD PLATE (PWB MAIN) (Page 12)
3-8. D.C. FAN (M301), PANEL (REAR) (Page 14)
3-9. POWER TRANSFORMER (T1) (Page 15)
(BX5BT)
3-5. BT BOARD (Page 13)
3-6. LID (CD) ASSY (Page 13)
3-7. PANEL (FRONT) ASSY (Page 14)
3-10. LOADING MECHANISM BLOCK (Page 15)
3-11. BASE UNIT (Page 16)
3-12. BELT (Page 16)
3-13. OP BASE ASSY (KSM-213D) (Page 17)

Note: Follow the disassembly procedure in the numerical order given.

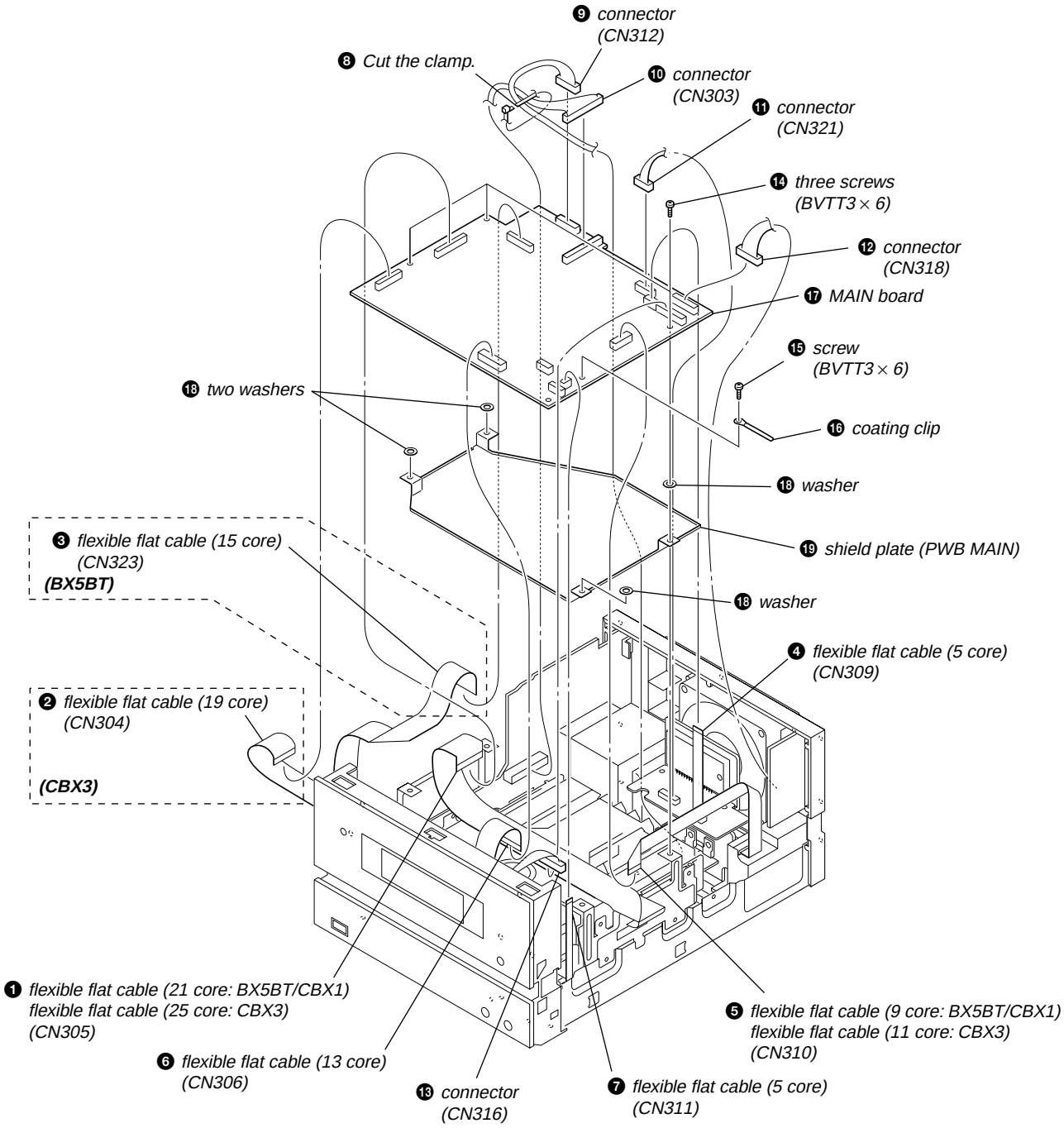
3-2. PANEL (SIDE L/R)



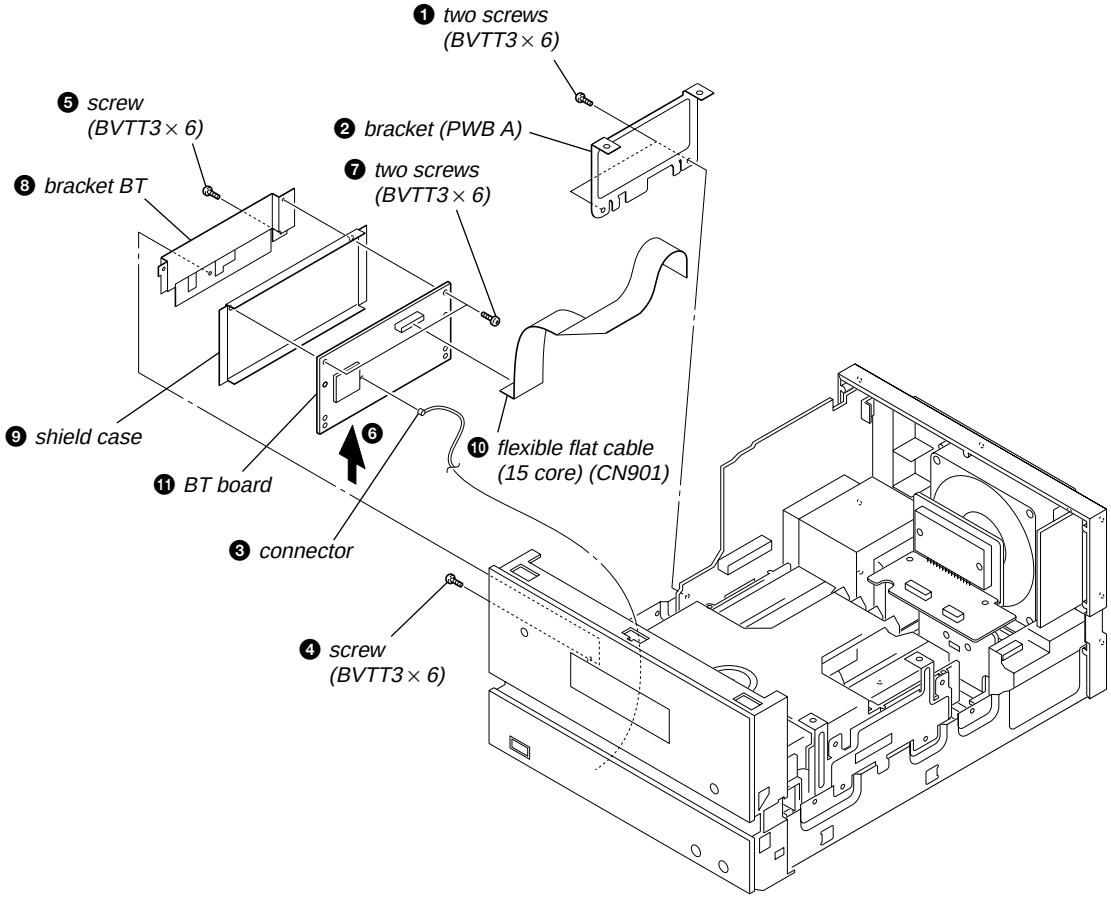
3-3. PANEL (TOP)



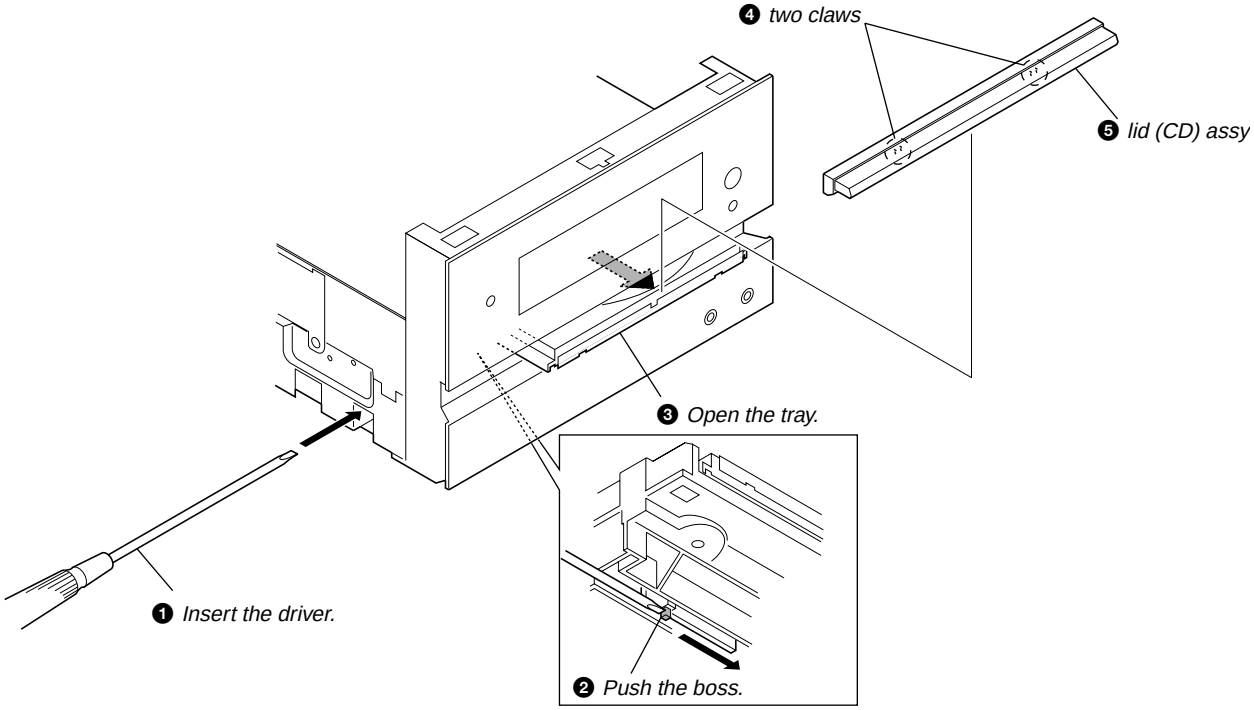
3-4. MAIN BOARD, SHIELD PLATE (PWB MAIN)


❾ connector (CN312)
❽ Cut the clamp.
❿ connector (CN303)
⓫ connector (CN321)
⓮ three screws (BVTT3 × 6)
⓬ connector (CN318)
⓱ MAIN board
⓯ screw (BVTT3 × 6)
⓲ two washers
⓰ coating clip
⓲ washer
⓳ shield plate (PWB MAIN)
❸ flexible flat cable (15 core) (CN323)
(BX5BT)
⓲ washer
❹ flexible flat cable (5 core) (CN309)
❷ flexible flat cable (19 core) (CN304)
(CBX3)
❶ flexible flat cable (21 core: BX5BT/CBX1) flexible flat cable (25 core: CBX3) (CN305)
❺ flexible flat cable (9 core: BX5BT/CBX1) flexible flat cable (11 core: CBX3) (CN310)
❻ flexible flat cable (13 core) (CN306)
⓭ connector (CN316)
❼ flexible flat cable (5 core) (CN311)

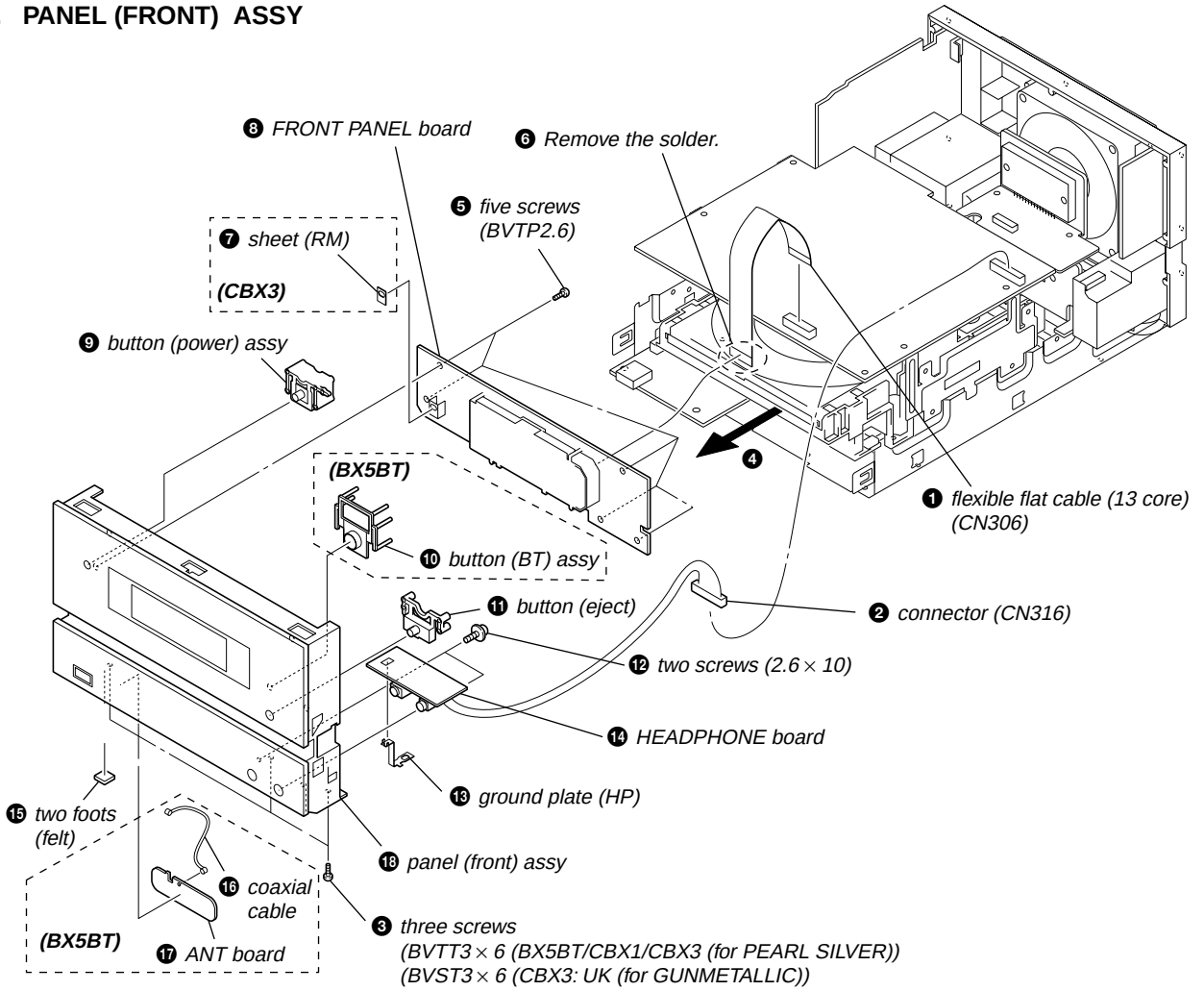
3-5. BT BOARD (BX5BT only)


❶ two screws (BVTT3 × 6)
❺ screw (BVTT3 × 6)
❷ bracket (PWB A)
❼ two screws (BVTT3 × 6)
❽ bracket BT
❾ shield case
❻
❿ flexible flat cable (15 core) (CN901)
⓫ BT board
❸ connector
❹ screw (BVTT3 × 6)

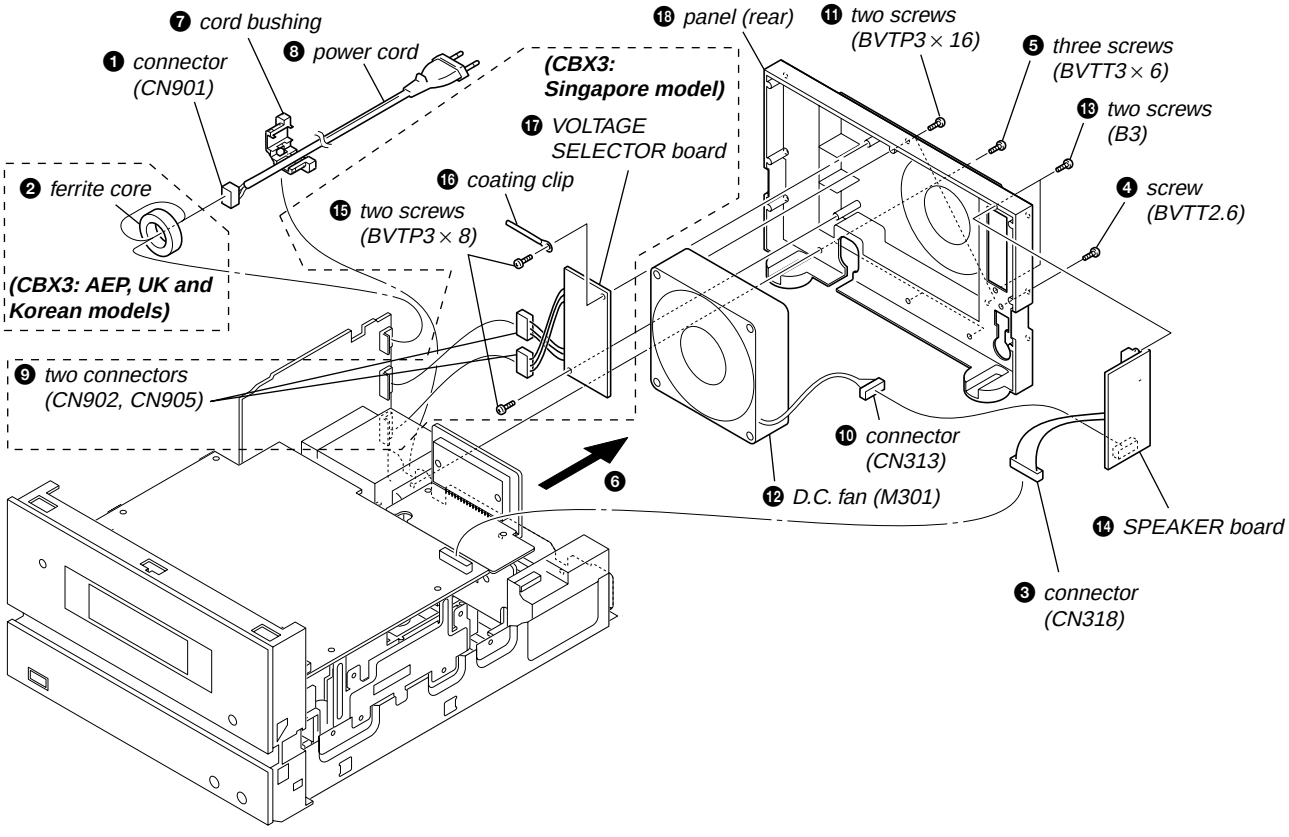
3-6. LID (CD) ASSY



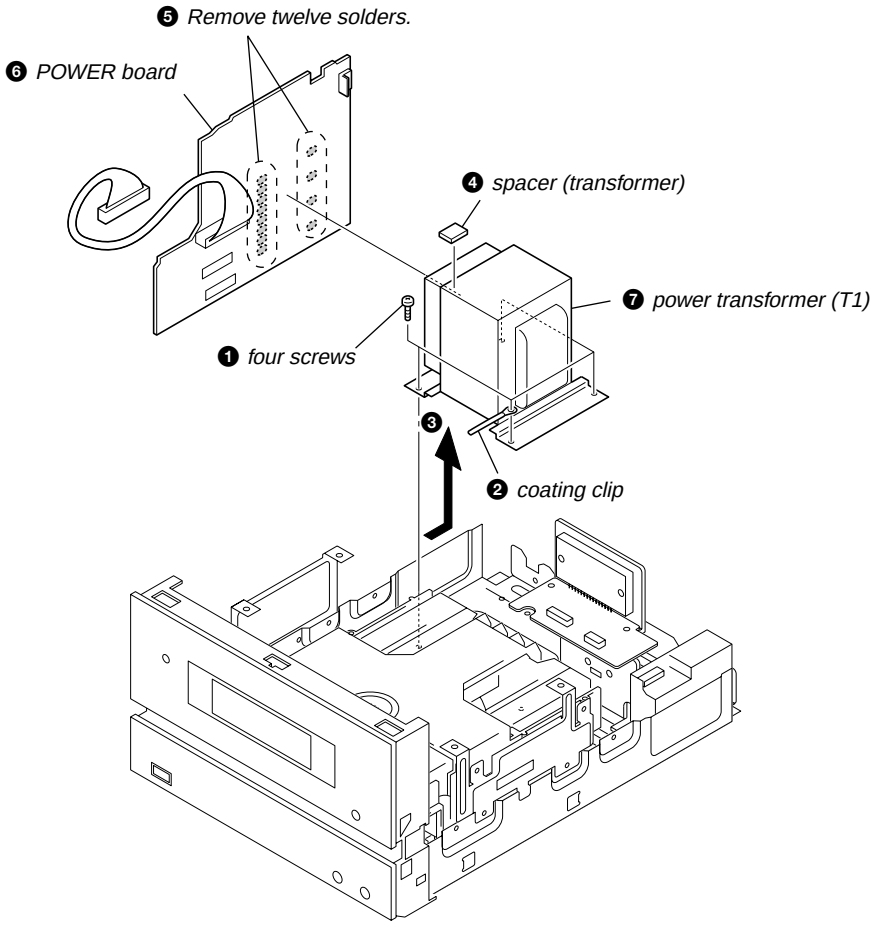
3-7. PANEL (FRONT) ASSY


❽ FRONT PANEL board
❻ Remove the solder.
❺ five screws (BVTP2.6)
❼ sheet (RM)
(CBX3)
❾ button (power) assy
(BX5BT)
❿ button (BT) assy
❹
❶ flexible flat cable (13 core) (CN306)
⓫ button (eject)
❷ connector (CN316)
⓬ two screws (2.6 × 10)
⓮ HEADPHONE board
⓭ ground plate (HP)
⓯ two foots (felt)
⓲ panel (front) assy
⓰ coaxial cable
(BX5BT)
⓱ ANT board
❸ three screws (BVTT3 × 6 (BX5BT/CBX1/CBX3 (for PEARL SILVER)) (BVST3 × 6 (CBX3: UK (for GUNMETALLIC))

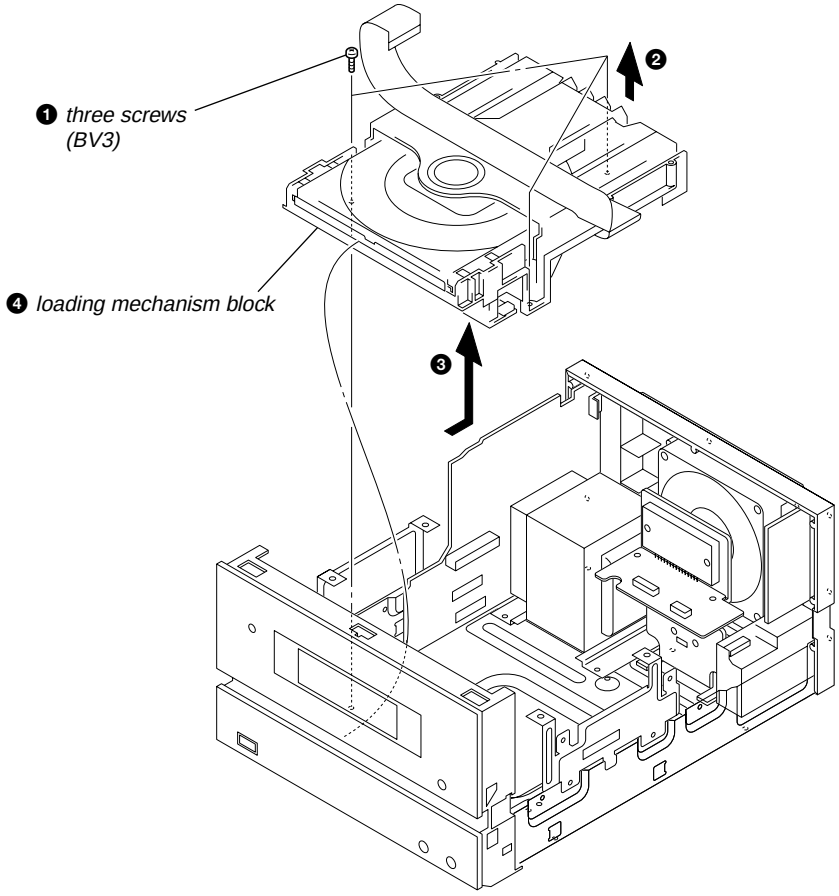
3-8. D.C. FAN (M301), PANEL (REAR)



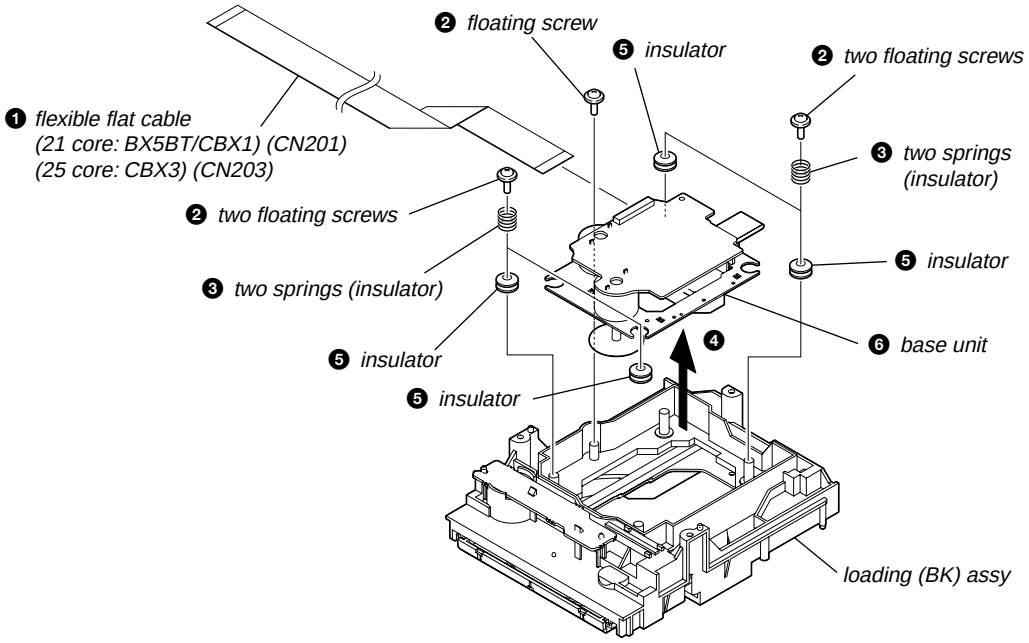
3-9. POWER TRANSFORMER (T1)



3-10. LOADING MECHANISM BLOCK

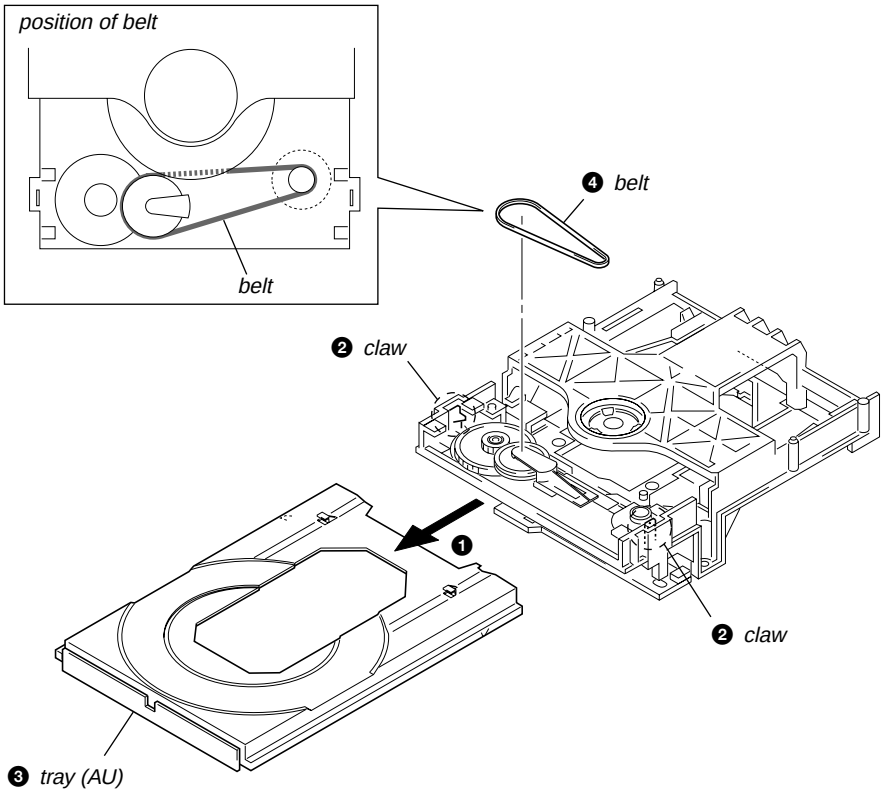


3-11. BASE UNIT

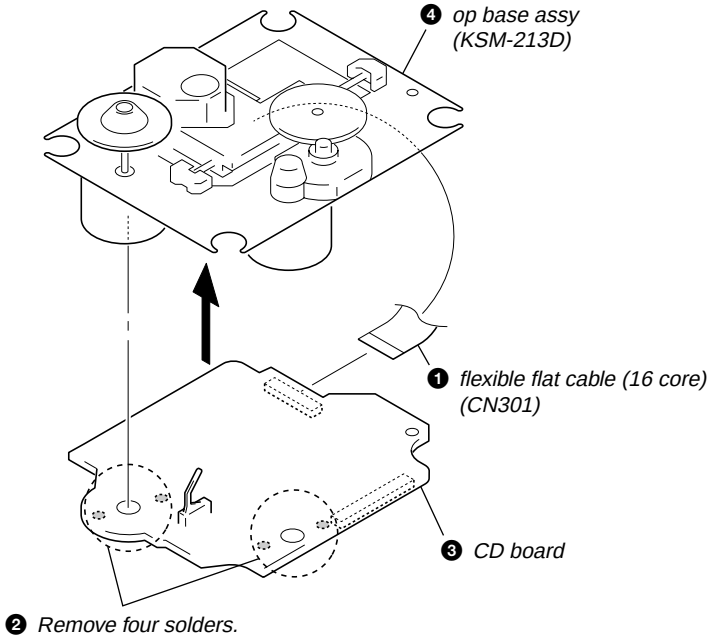


– Bottom view –

3-12. BELT



3-13. OP BASE ASSY (KSM-213D)



SECTION 4
TEST MODE

COLD RESET

The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons of [■/CANCEL] , [📁–] and [I/⏻] simultaneously.
2. The system is reset and becomes standby states.

COMMON TEST MODE

This mode is used to check operations of amplifier.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press three buttons of [■/CANCEL] , [ENTER] and [📁–] simultaneously.
3. When the COMMON test mode is activated, “AUDIO IN” is displayed on the liquid crystal display and “🕘 PLAY SLEEP” blink on the liquid crystal display.
4. Each time [EQ] button on the remote commander is pressed, the display changes starting “TONE MAX”, “TONE MIN” and “TONE FLAT” this order.
5. Press the [VOL –] button, “VOLUME MIN” is displayed on the liquid crystal display. Press the [VOL +] button, “VOLUME MAX” is displayed on the liquid crystal display.
6. To release this mode, press the [I/⏻] button.

PANEL TEST MODE

This mode is used to check the liquid crystal display, LED, model, destination, software version and key.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press three buttons of [CD ▶II], [DSGX] and [ENTER] simultaneously.
3. All segments on the liquid crystal display and [STANDBY] LED light up.
4. Press the [ENTER] button, the model and destination are displayed on the liquid crystal display.
5. Press the [ENTER] button again, MC version is displayed on the liquid crystal display.
6. Each time [ENTER] button is pressed, the display changes starting from MC version, GC version, USBL version (CBX3 only), USBM version (CBX3 only), CD version, CDD version, CDMA version, CDMB version, BDA version, BDB version, ST version, TA version and TM version this order, and returns to the MC version display.
7. When [■/CANCEL] button is pressed while the MC version is displayed, year, month and day of the software creation is displayed. When [■/CANCEL] button is pressed again, the display returns to the MC version display.
8. Press the [DSGX] button, the key test mode is activated and “K 0” is displayed on the liquid crystal display.
9. Each time a button is pressed, “K” value increases. However, once a button is pressed, it is no longer taken into account. All keys are pressed, display becomes “K18”.
10. To release this mode, press three buttons in the same manner as step 2, or disconnect the power cord.

TUNER STEP CHANGE

(BX5BT/CBX1/CBX3: Canadian, Australian, Singapore, Taiwan and Korean models)

A step of AM tuning interval can be changed over between 9 kHz or 10 kHz.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [TUNER/BAND] button to select “AM”.
3. Press the [I/⏻] button again to turn the power off.
4. Press two buttons of [TUNER/BAND] and [I/⏻] simultaneously.
5. The message “AM 9kHz Step” or “AM 10kHz Step” is displayed on the liquid crystal display and thus the tuning interval is changed over.

CD SHIP MODE

This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select “CD” (BX5BT/CBX1). Press the [CD] button on the remote commander to select “CD” (CBX3).
3. Press three buttons of [DSGX], [TUNER/BAND] and [⏏] simultaneously.
4. After the “STANDBY” display blinks, the ship mode is set and the system is reset.

CD SHIP MODE & MEMORY CLEAR

This mode is used to perform CD ship mode and cold reset simultaneously.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press three buttons of [■/CANCEL], [TUNER/BAND] and [⏏] simultaneously.
3. After the “STANDBY” display blinks, the ship mode is set and the system is reset.

ANTITHEFT LOCK MODE

This mode is used to unable to take sample disc out of disc tray in the shop.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [⏏] button to open the disc tray and set the CD disc.
3. Press the [⏏] button to close the disc tray.
4. Press the [FUNCTION] button to select “CD” (BX5BT/CBX1). Press the [CD] button on the remote commander to select “CD” (CBX3).
5. Press two buttons of [■/CANCEL] and [⏏] for 5 seconds.
6. The message “LOCKED” is displayed on the liquid crystal display and the disc tray is locked. (Even if pressing the [⏏] button, the message “LOCKED” is displayed on the liquid crystal display and the disc tray is locked)
7. To release from this mode, press two buttons of [■/CANCEL] and [⏏] for 5 seconds.
8. The message “UNLOCKED” is displayed on the liquid crystal display and the disc tray is unlocked.

CD POWER MANAGE

This mode is used to changed over CD power on/off for decreasing of reception noise in the tuner mode.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select "CD" (BX5BT/CBX1). Press the [CD] button on the remote commander to select "CD" (CBX3).
3. Press the [I/⏻] button again to turn the power off.
4. Press two buttons of [■ /CANCEL] and [I/⏻] simultaneously.
5. The message "CD POWER ON" or "CD POWER OFF"is displayed on the liquid crystal display, and CD power on/off is changed over in the tuner mode.

CD SERVICE MODE

This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the optical pick-up.

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select "CD" (BX5BT/CBX1). Press the [CD] button on the remote commander to select "CD" (CBX3).
3. Press three buttons of [■ /CANCEL], [CD ►II] and [⏏] simultaneously, the message "SERVICE M" is displayed on the liquid crystal display.
4. Press the [TUNE–] button to move the optical pick-up to inside track and the message "SLED IN" is displayed on the liquid crystal display, or press the [TUNE +] button to outside track and the message "SLED OUT" is displayed on the liquid crystal display.
5. Press the [CD ►II] button, "LD ON" or "LD OFF" is displayed on the liquid crystal display. Each time [CD ►II] button is pressed, laser diode on/off is changed over.
6. To release this mode, press the [I/⏻] button.

BT TEST MODE

(BX5BT)

This mode is used to check the firmware version and address of bluetooth module.

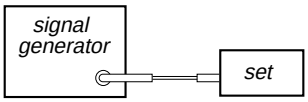
Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press the [FUNCTION] button to select "BLUETOOTH".
3. Press three buttons of [DSGX], [BLUTOOTH ►II] and [BLUTOOTH OPR] simultaneously, the message "BT Test" is displayed on the liquid crystal display. Then, the display is automatically changed to the firmware version of bluetooth module.
4. Press the [DISPLAY] button, address of bluetooth module is displayed on the liquid crystal display.
5. To release this mode, press the [I/⏻] button.

SECTION 5
ELECTRICAL CHECKS

TUNER SECTION

FM TUNE LEVEL CHECK



Procedure:

1. Turn on the set.
2. Input the following signal from signal generator to FM antenna input directly.

   Carrier frequency: A = 87.5 MHz, B = 98 MHz, C = 108 MHz

   Deviation : 75 kHz
   Modulation : 1 kHz
   ANT input : 35 dBu (EMF)

Note: Use 75 ohm coaxial cable to connect signal generator and the set.
You cannot use video cable for checking.
Use signal generator whose output impedance is 75 ohm.

3. Set to FM tuner function and tune A, B and C signals.
4. Confirm "TUNED" is lit on the display for A, B and C signals.

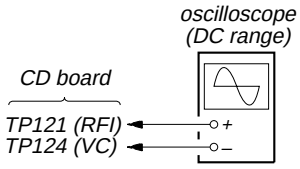
When the selected station signal is received in good condition, "TUNED" is displayed.

CD SECTION

Note:

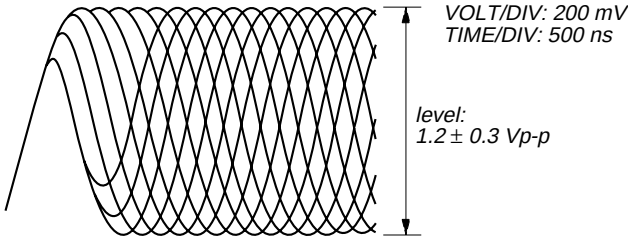
1. CD Block is basically constructed to operate without adjustment.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10 MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Check the focus bias check when optical pick-up block is replaced.

FOCUS BIAS CHECK



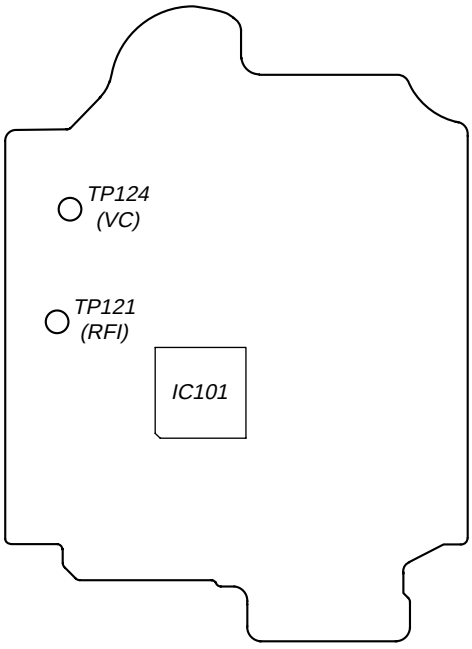
Procedure :

1. Connect oscilloscope to TP121 (RFI) and TP124 (VC) on the CD board.
2. Press the I/⏻ button to turn the power ON.
3. Set disc (YEDS-18) on the tray and press the CD ▶II button to playback.
4. Confirm that oscilloscope waveform is as shown in the figure below. (eye pattern)
   A good eye pattern means that the diamond shape (◊) in the center of the waveform can be clearly distinguished.



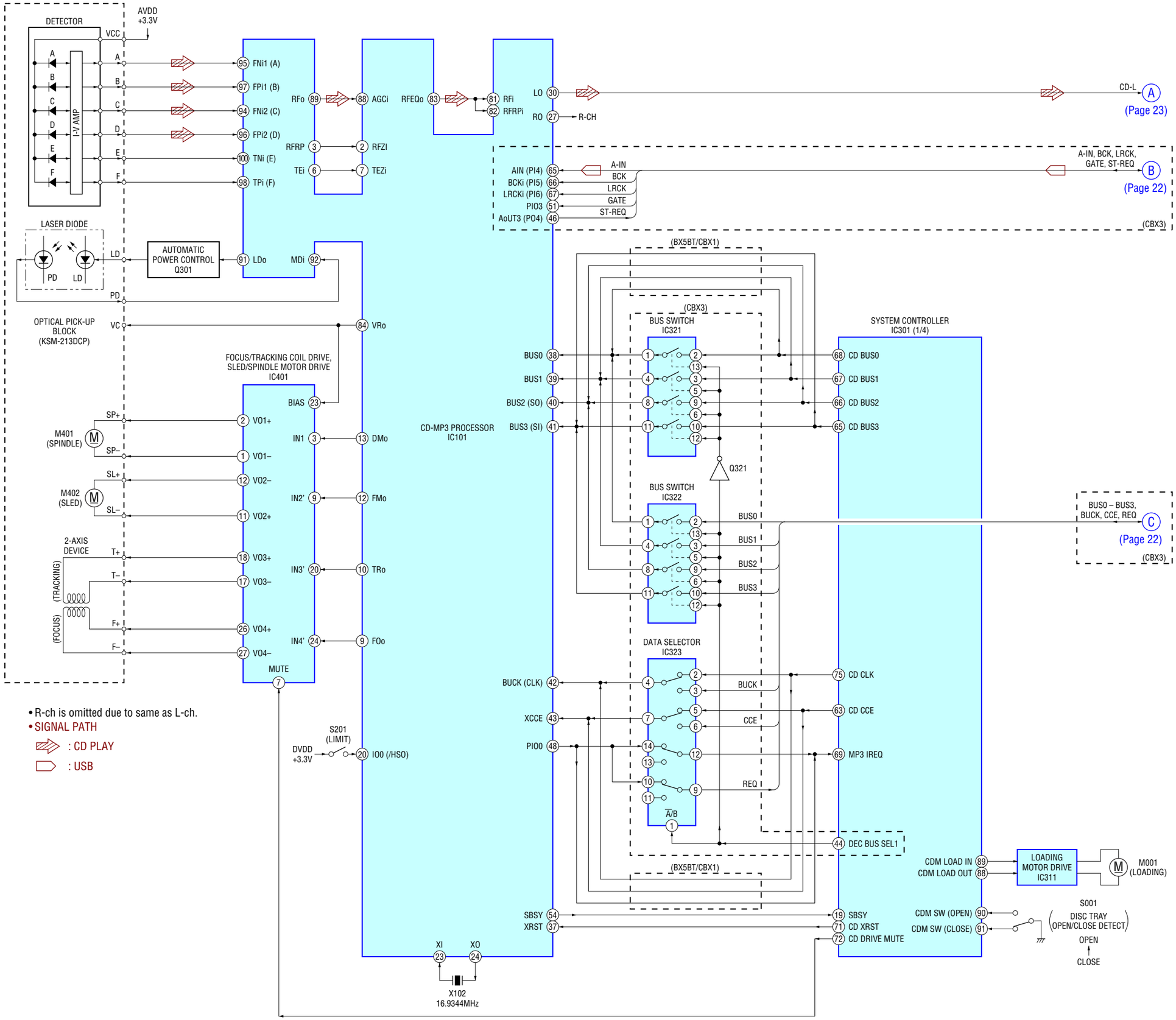
Checking Location:

– CD Board (Conductor Side) –



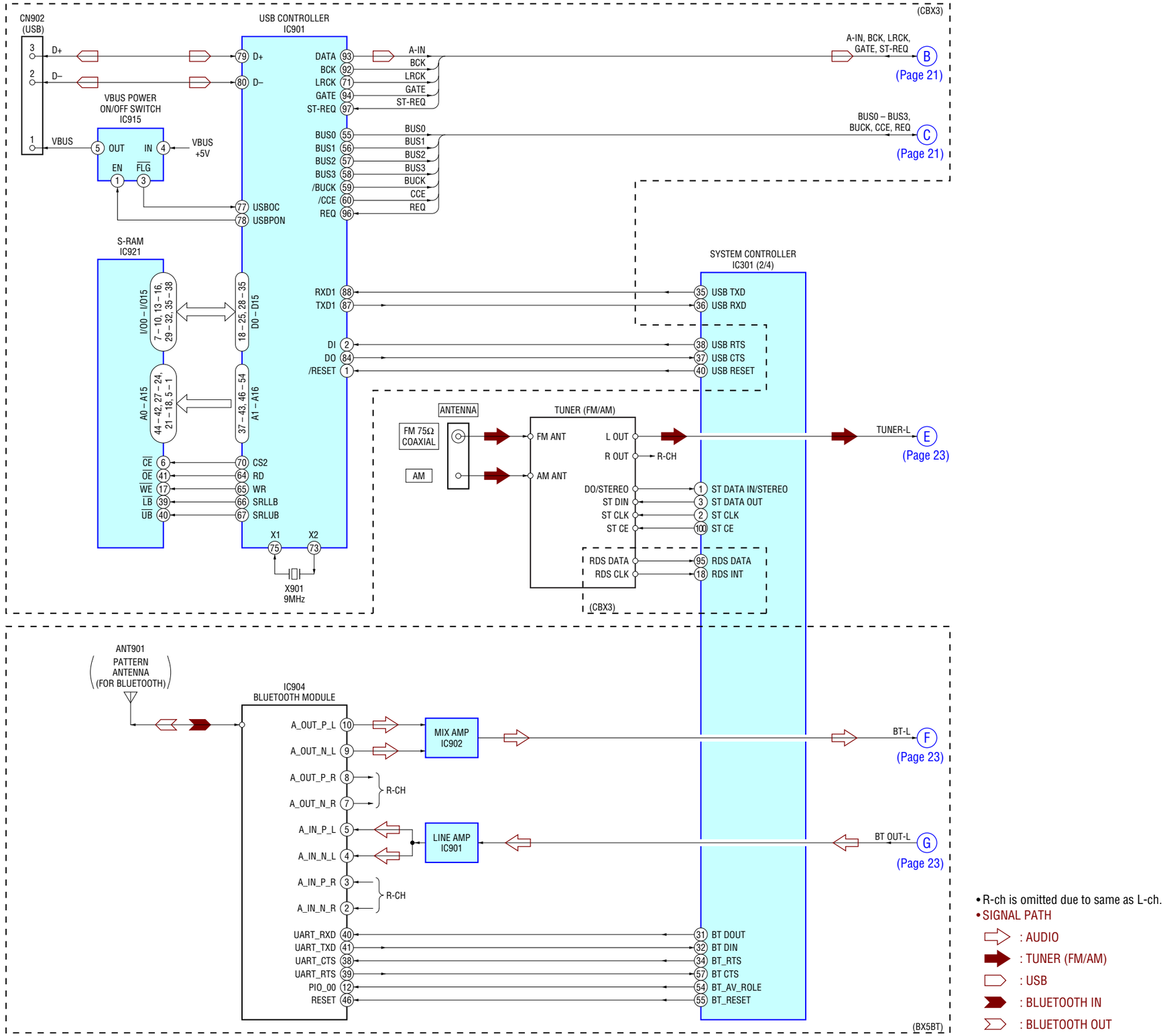
SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM – CD SERVO Section –



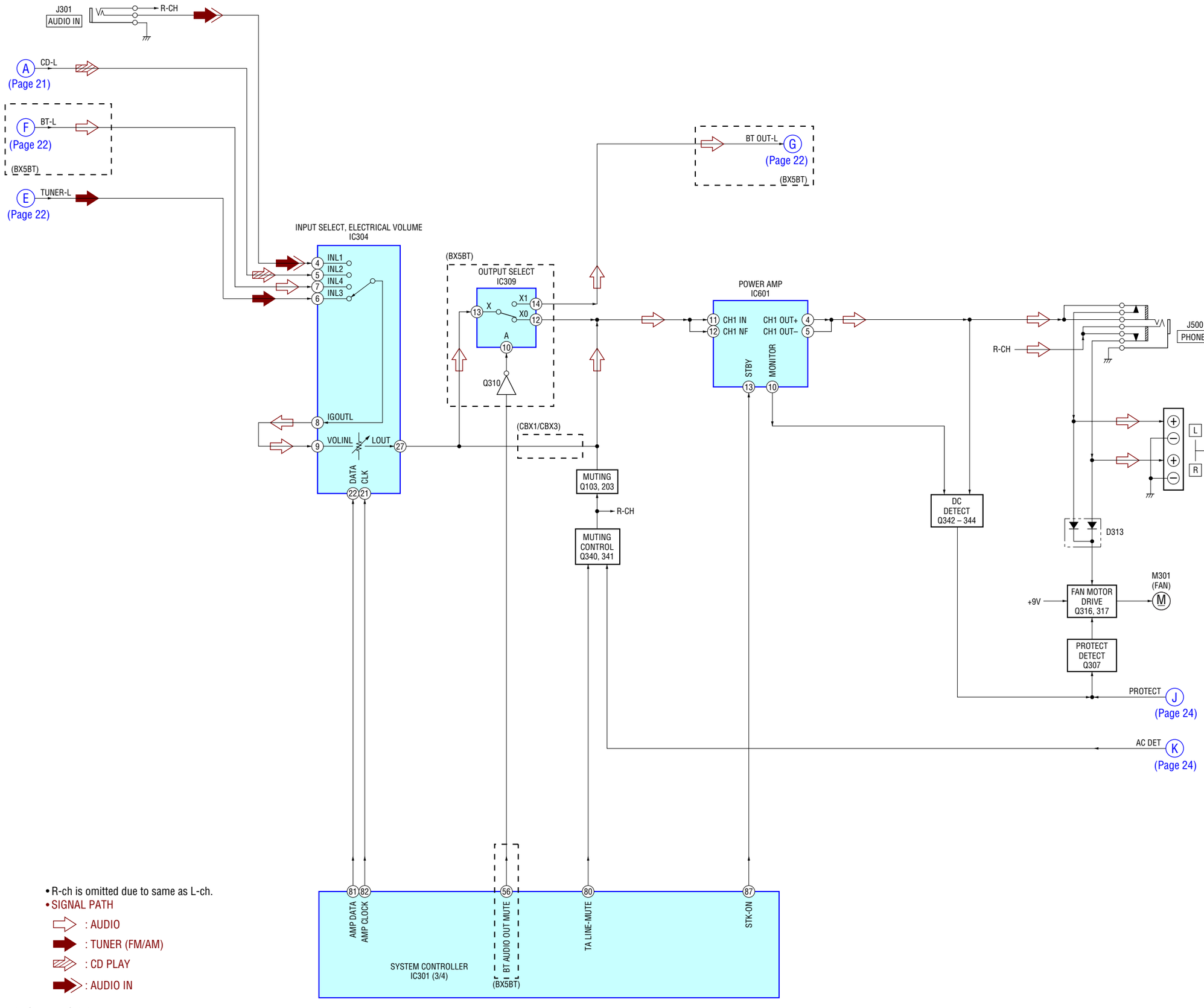
• R-ch is omitted due to same as L-ch.
• SIGNAL PATH
: CD PLAY
: USB

6-2. BLOCK DIAGRAM – TUNER, USB, BLUETOOTH Section –



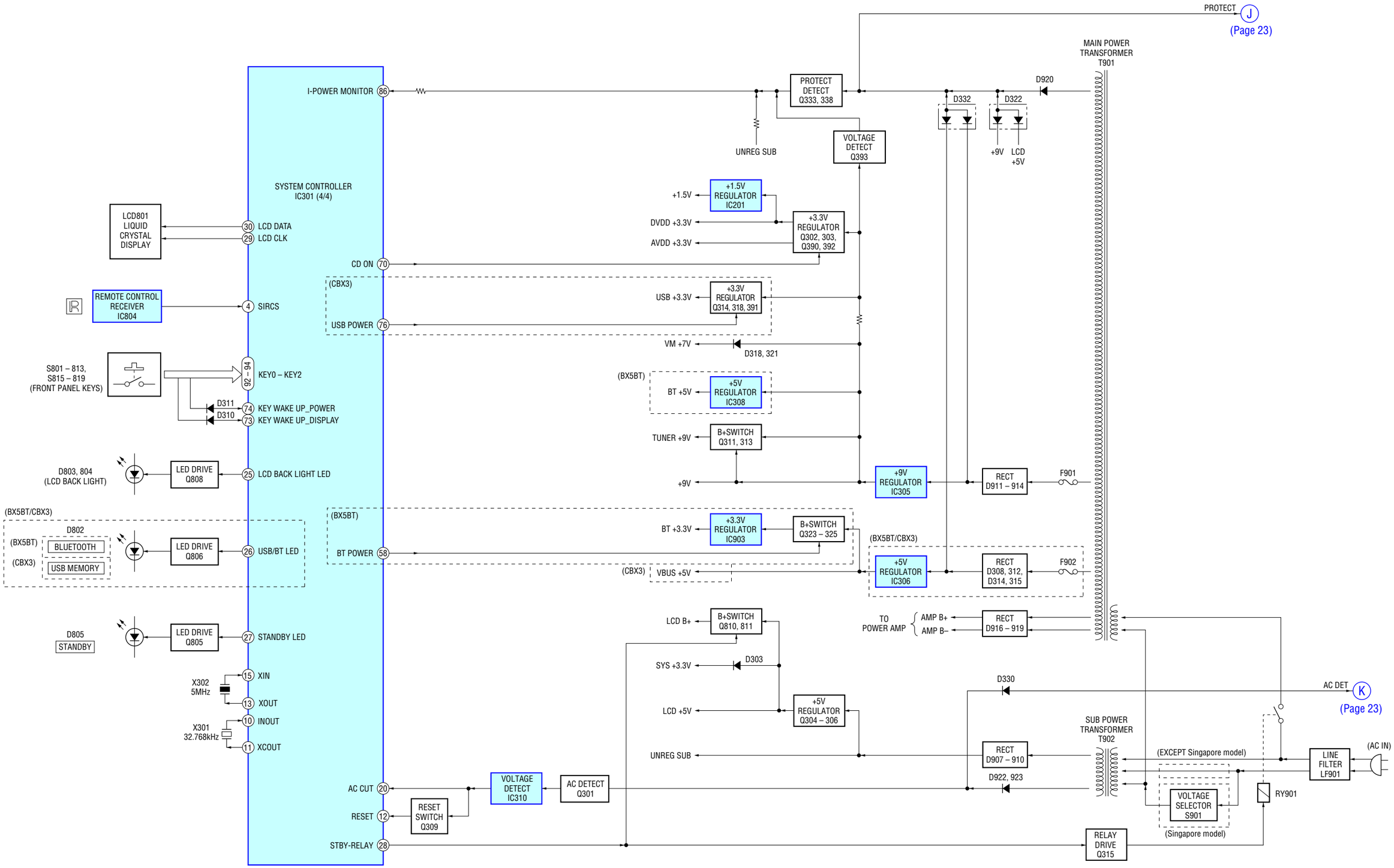
- R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  - : AUDIO
  - : TUNER (FM/AM)
  - : USB
  - : BLUETOOTH IN
  - : BLUETOOTH OUT

6-3. BLOCK DIAGRAM – MAIN Section –



- R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  - : AUDIO
  - : TUNER (FM/AM)
  - : CD PLAY
  - : AUDIO IN

6-4. BLOCK DIAGRAM – PANEL, POWER SUPPLY Section –



• Note for Printed Wiring Boards and Schematic Diagrams

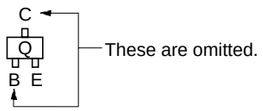
Note on Printed Wiring Board:
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

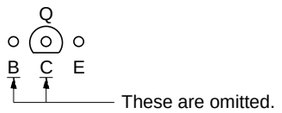
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transistor



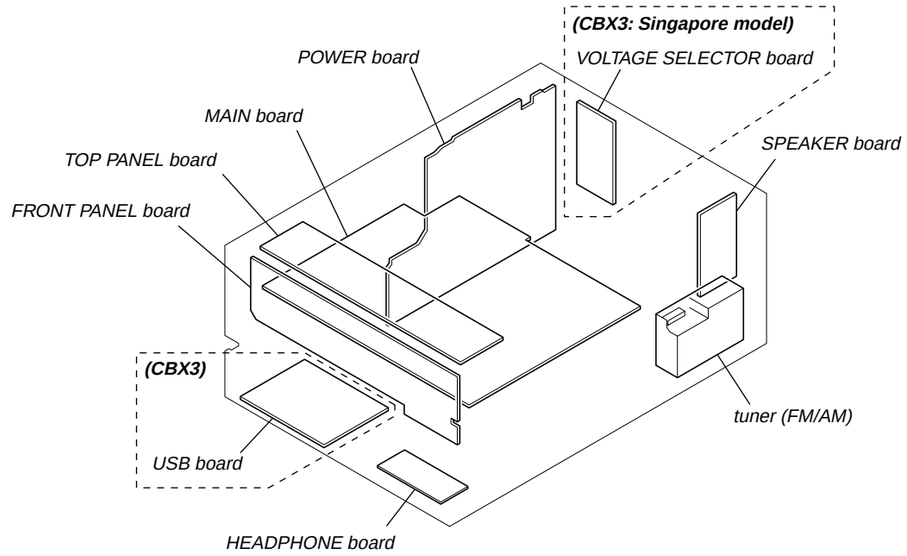


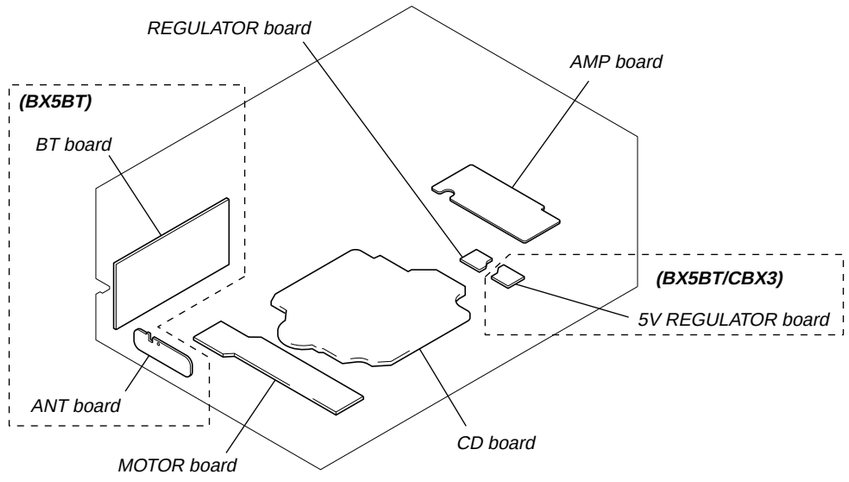
Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  – CD Board –
  no mark : CD PLAY
  [ ] : USB
  – USB Board –
  no mark : USB
  – BT Board –
  no mark : BLUETOOTH
  – Other Boards –
  no mark : TUNER (FM/AM)
  ( ) : CD PLAY
  [ ] : BLUETOOTH
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : AUDIO
  : TUNER (FM/AM)
  : CD PLAY
  : USB
  : BLUETOOTH IN
  : BLUETOOTH OUT
  : AUDIO IN
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  KR : Korean model
  SP : Singapore model
  TW : Taiwan model

• Circuit Boards Location



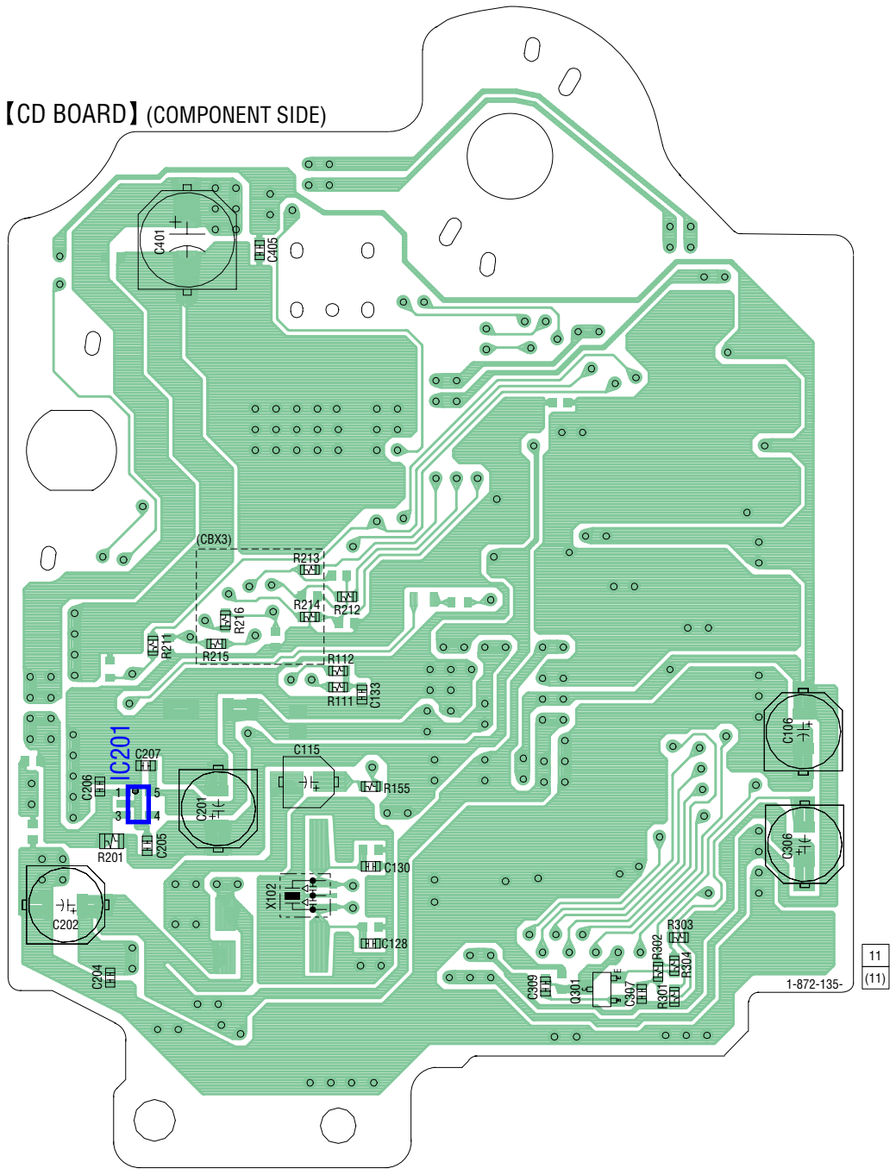


6-5. PRINTED WIRING BOARDS – CD Section –

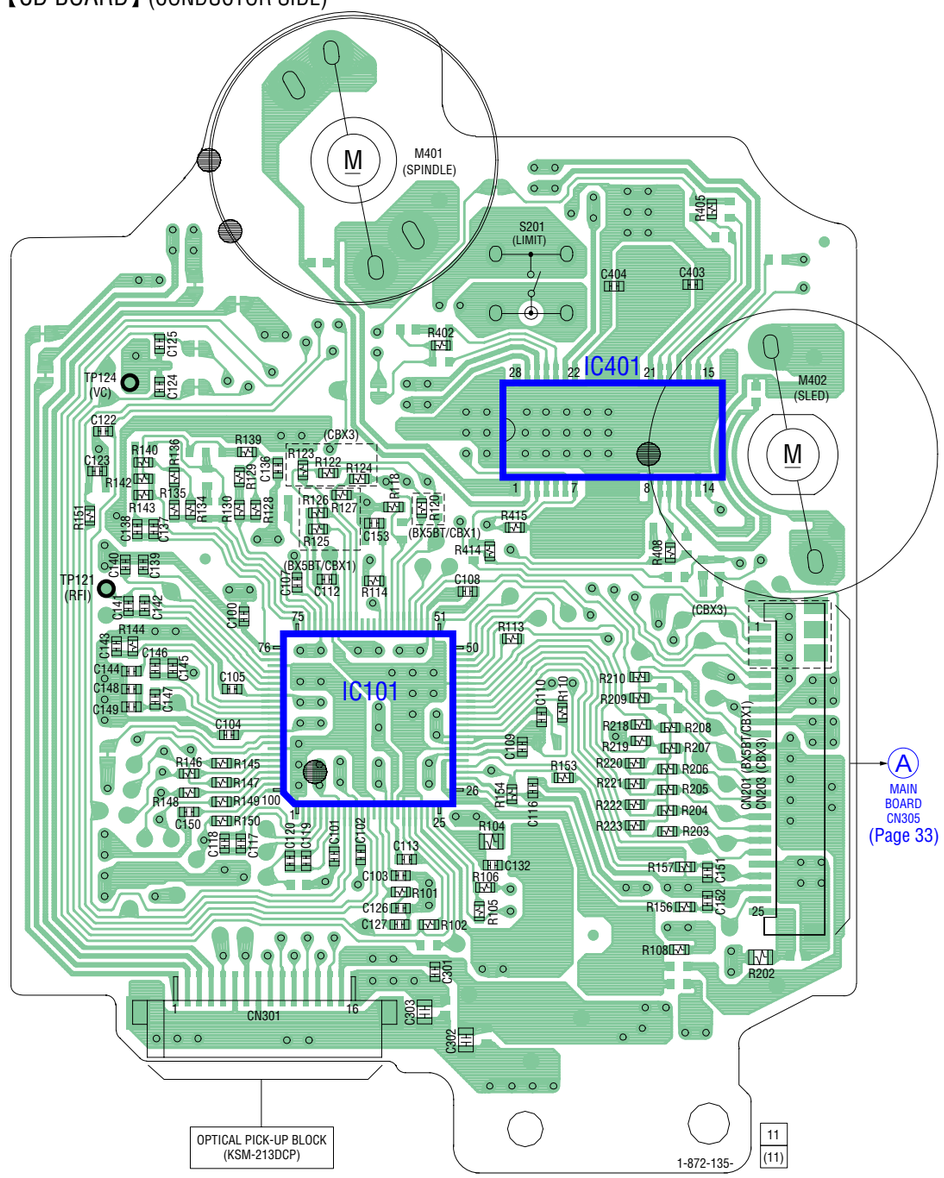
• See page 25 for Circuit Boards Location.

: Uses unleaded solder.

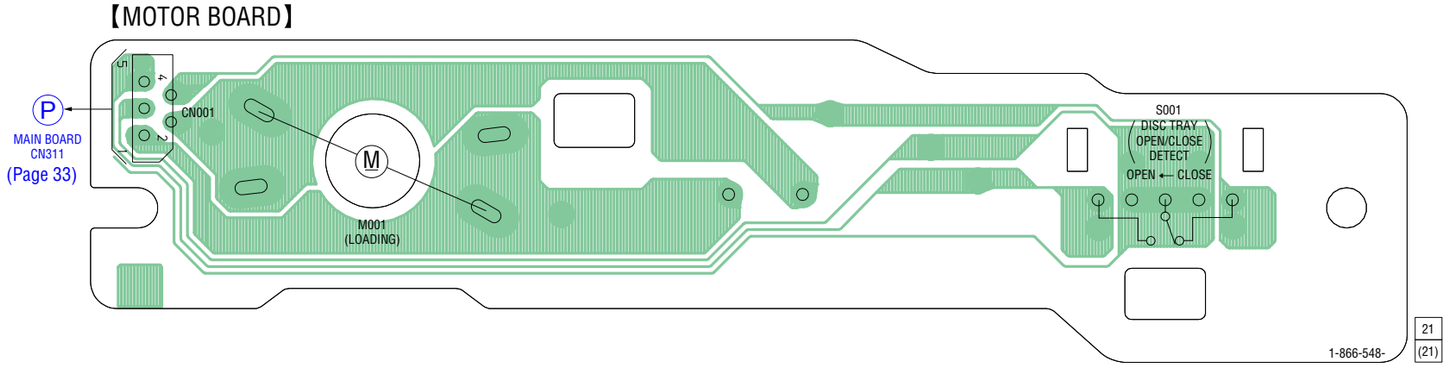
【CD BOARD】(COMPONENT SIDE)



【CD BOARD】(CONDUCTOR SIDE)

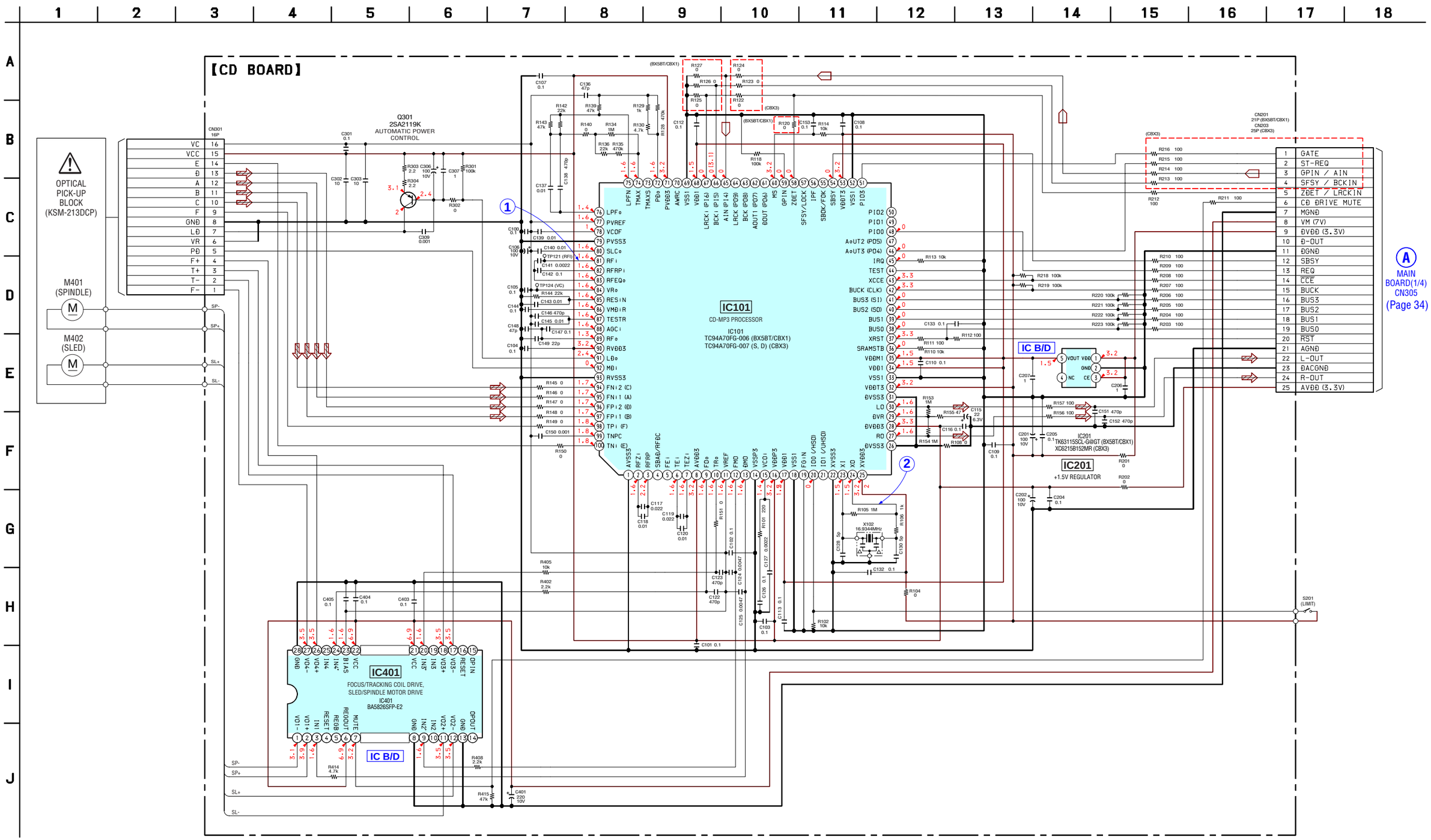


【MOTOR BOARD】



6-6. SCHEMATIC DIAGRAM – CD Board –

• See page 46 for Waveforms. • See page 46 for IC Block Diagrams. • See page 49 for IC Pin Function Description.

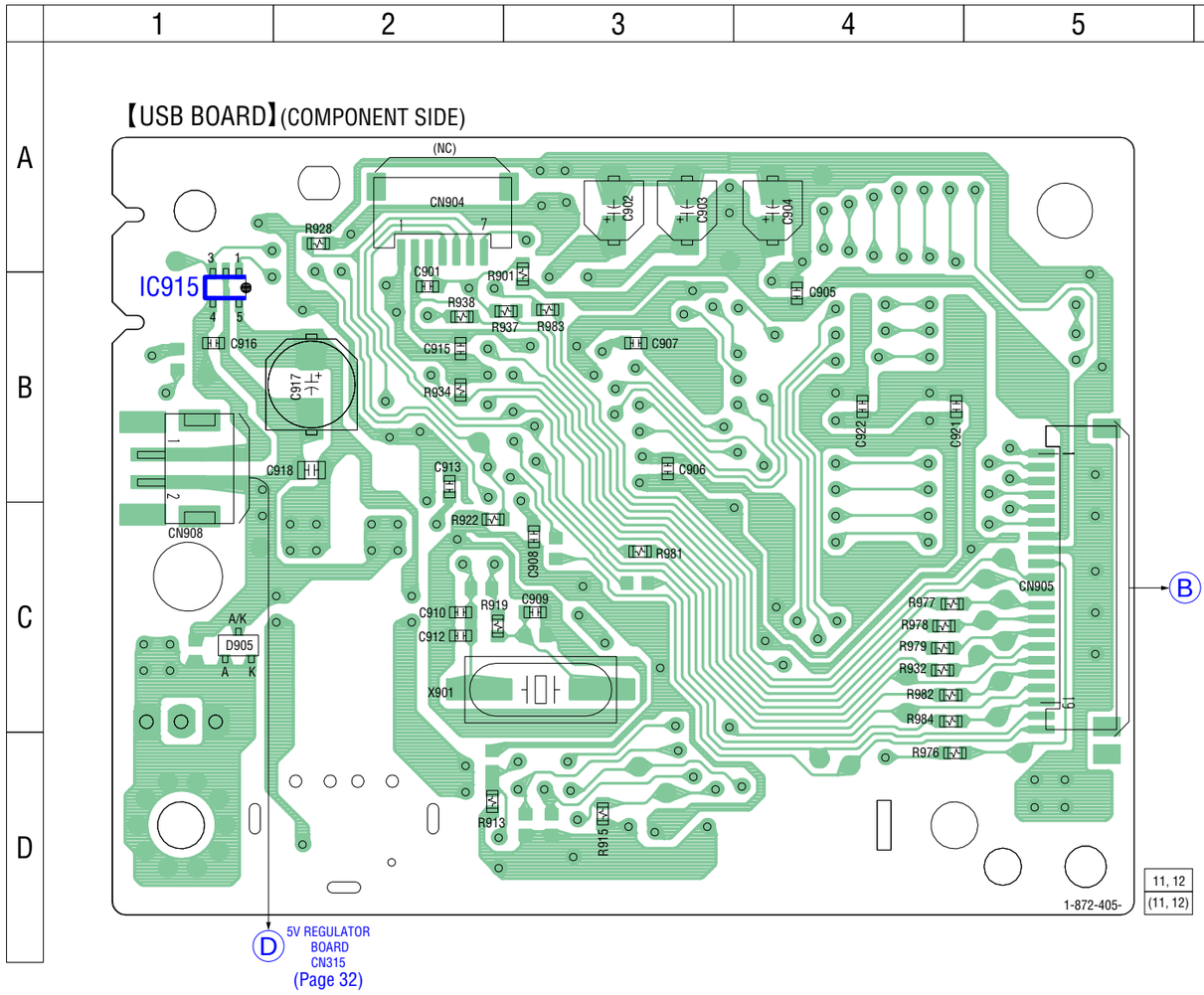


6-7. PRINTED WIRING BOARD – USB Board (CBX3) –

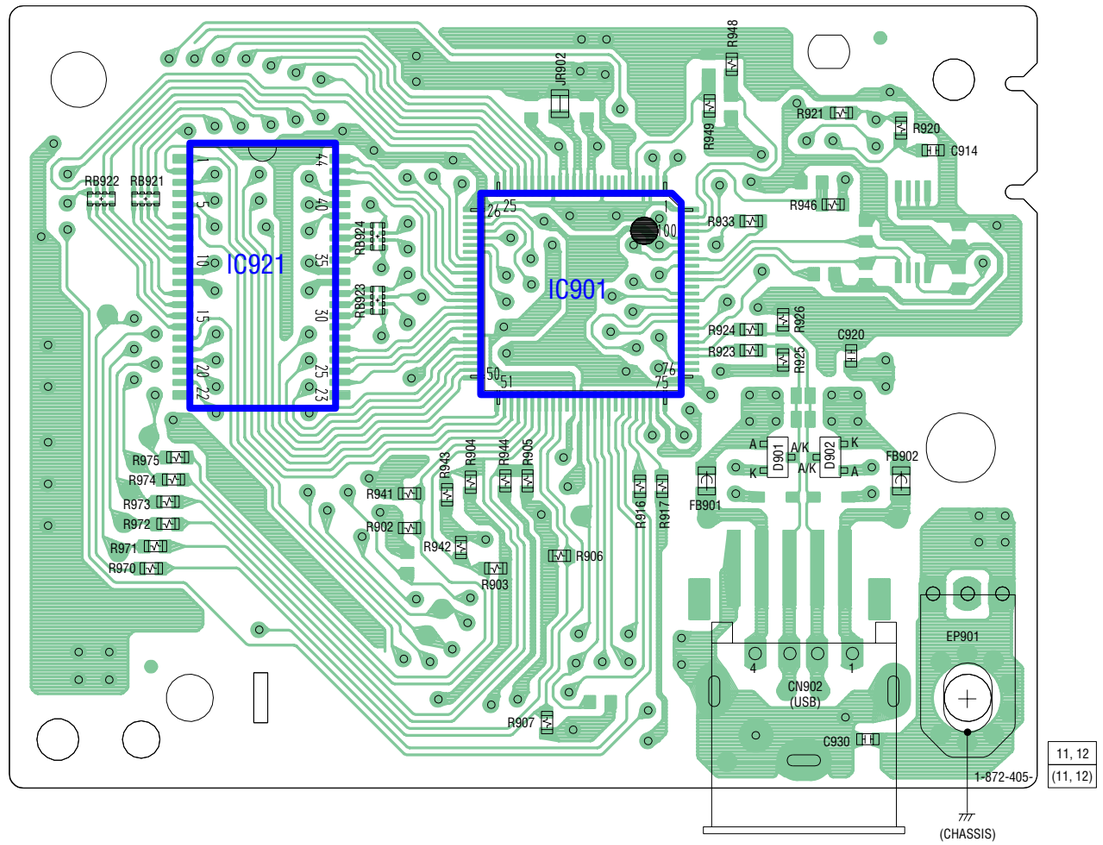
• See page 25 for Circuit Boards Location.

: Uses unleaded solder.

【USB BOARD】(COMPONENT SIDE)



【USB BOARD】(CONDUCTOR SIDE)

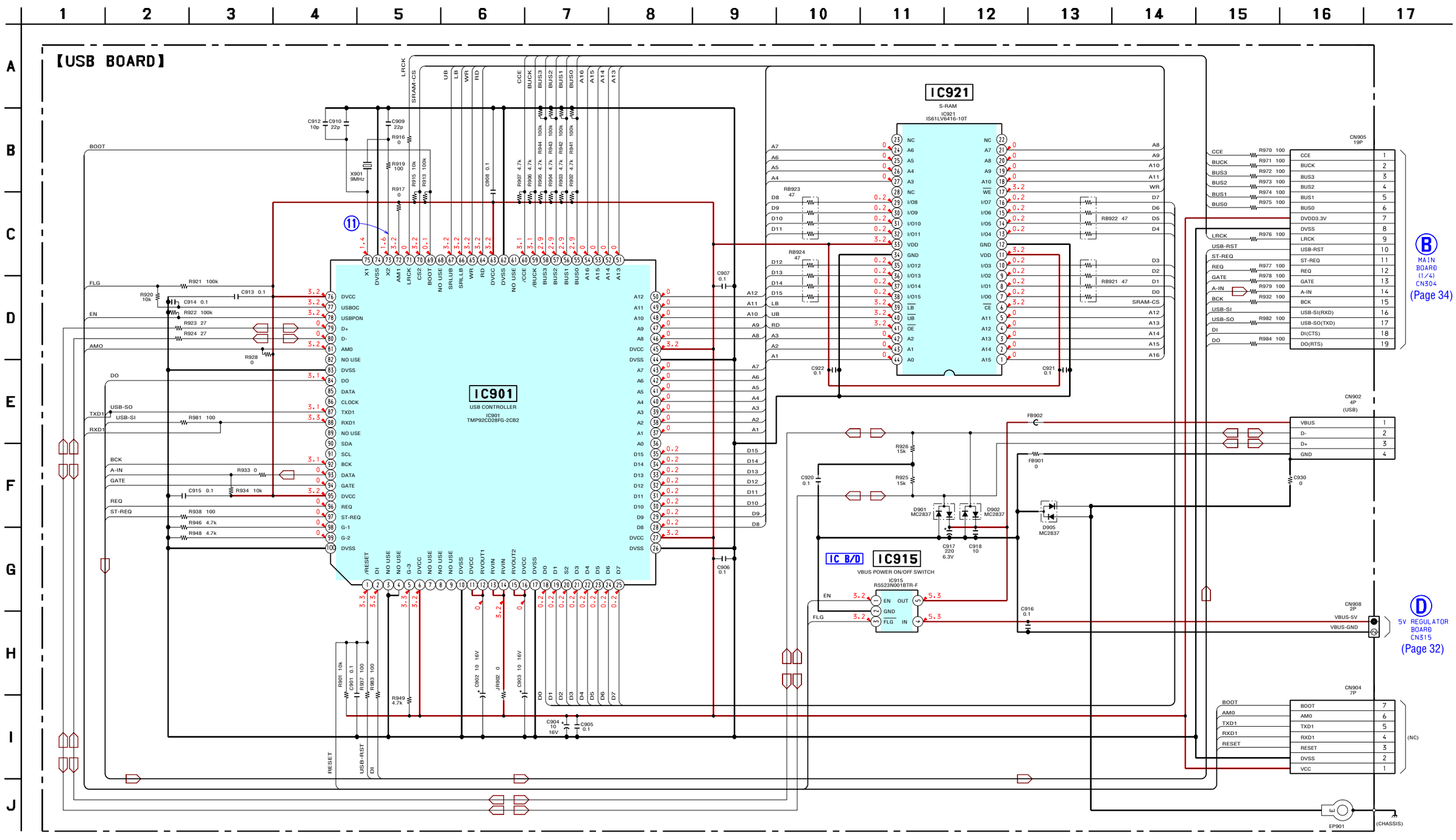


- **Semiconductor Location**

Ref. No.	Location
D901	C-9
D902	C-10
D905	C-1
IC901	B-8
IC915	B-1
IC921	B-7

6-8. SCHEMATIC DIAGRAM – USB Board (CBX3) –

• See page 46 for Waveforms. • See page 46 for IC Block Diagrams. • See page 49 for IC Pin Function Description.

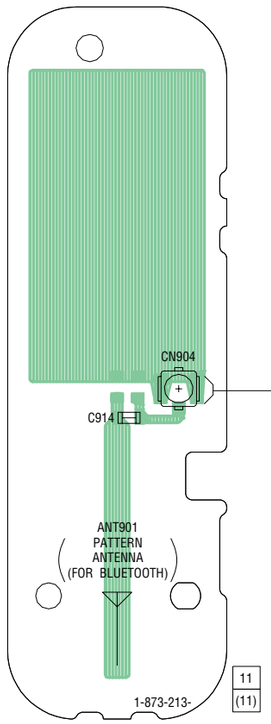


6-9. PRINTED WIRING BOARDS – BLUETOOTH Section (BX5BT) –

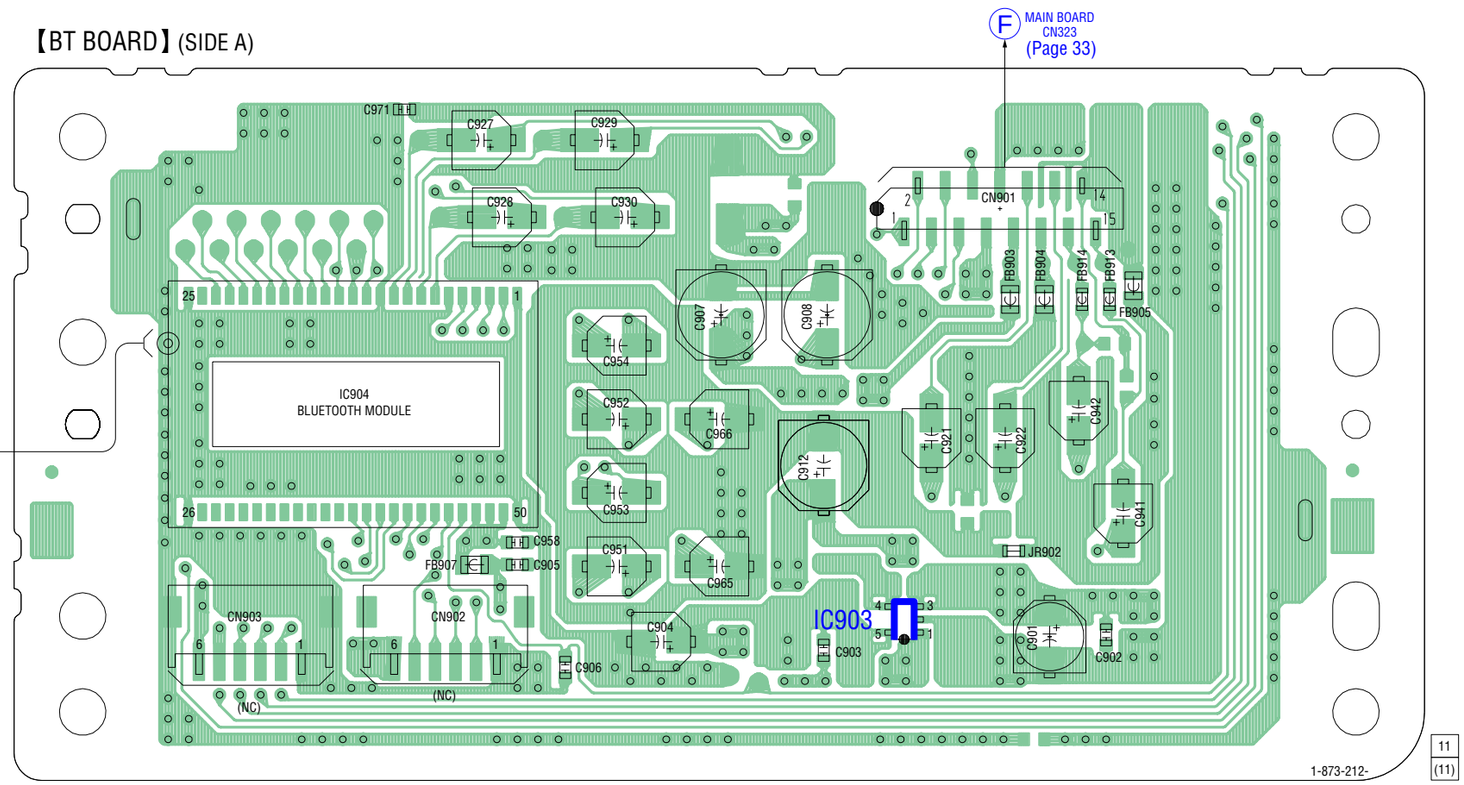
• See page 25 for Circuit Boards Location.

: Uses unleaded solder.

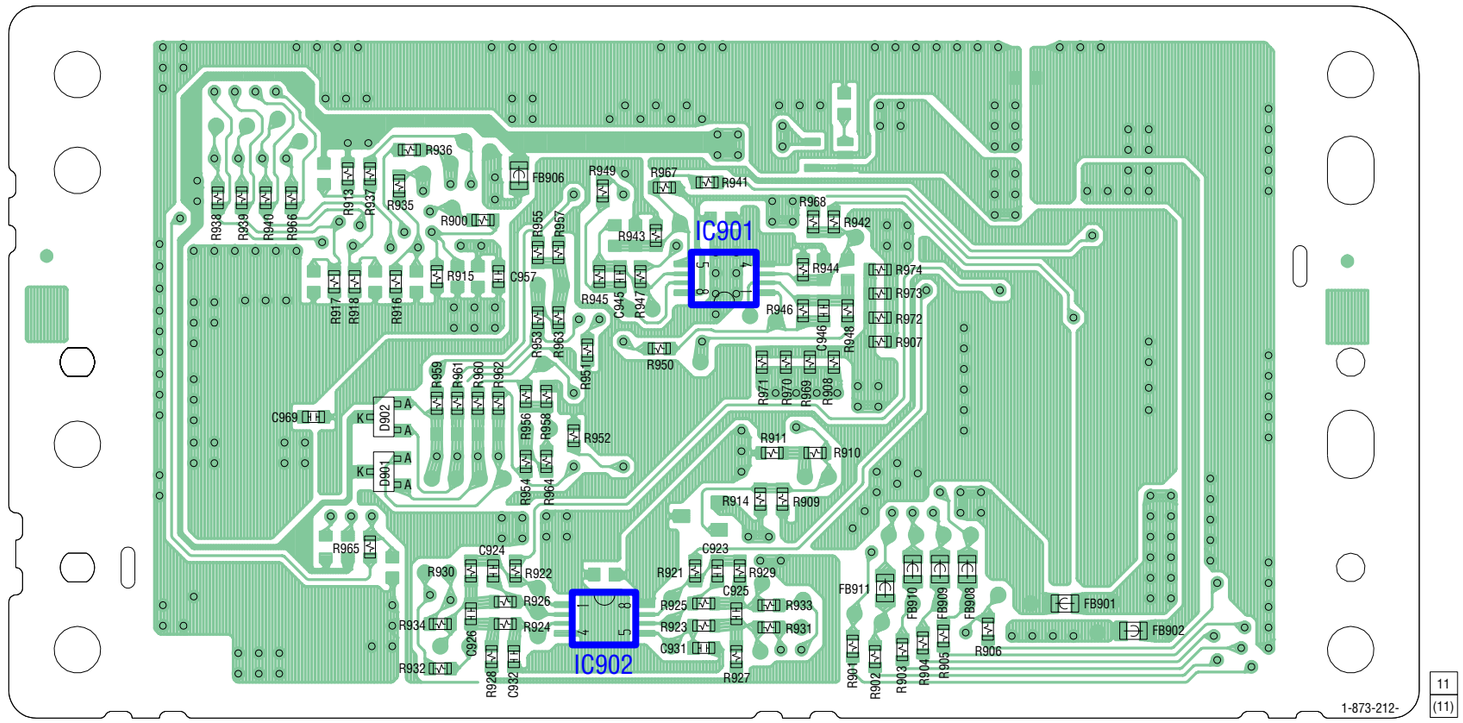
【ANT BOARD】



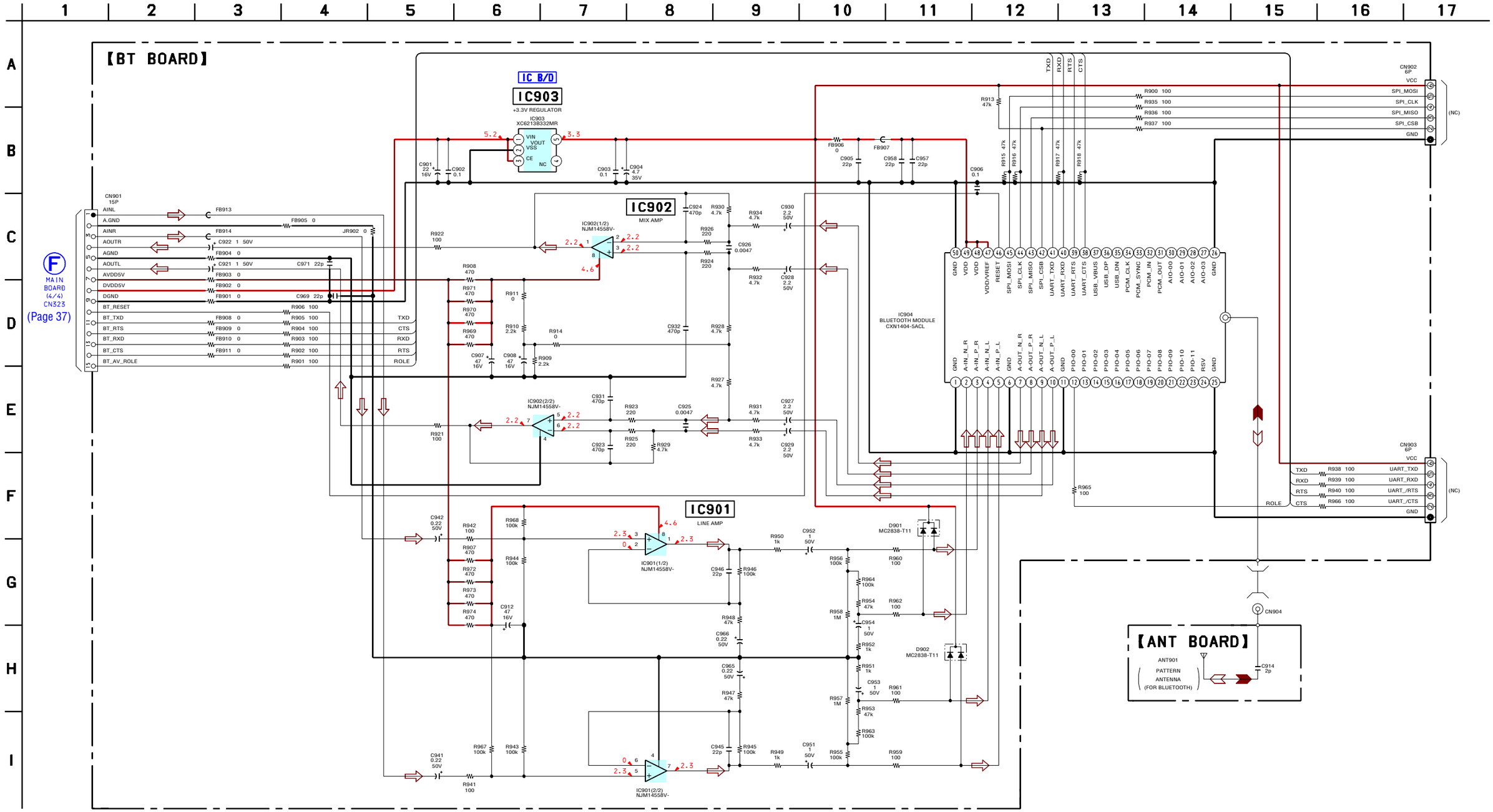
【BT BOARD】(SIDE A)



【BT BOARD】(SIDE B)

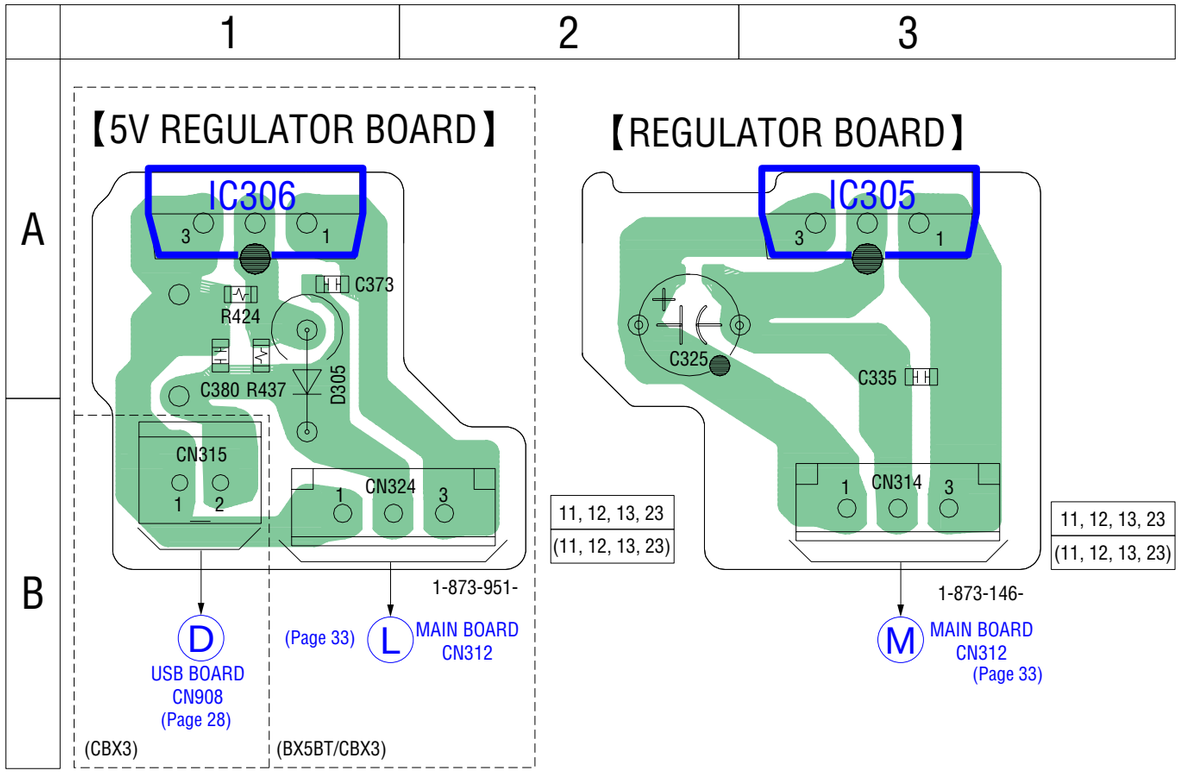


6-10. SCHEMATIC DIAGRAM – BLUETOOTH Section (BX5BT) – • See page 46 for IC Block Diagrams.

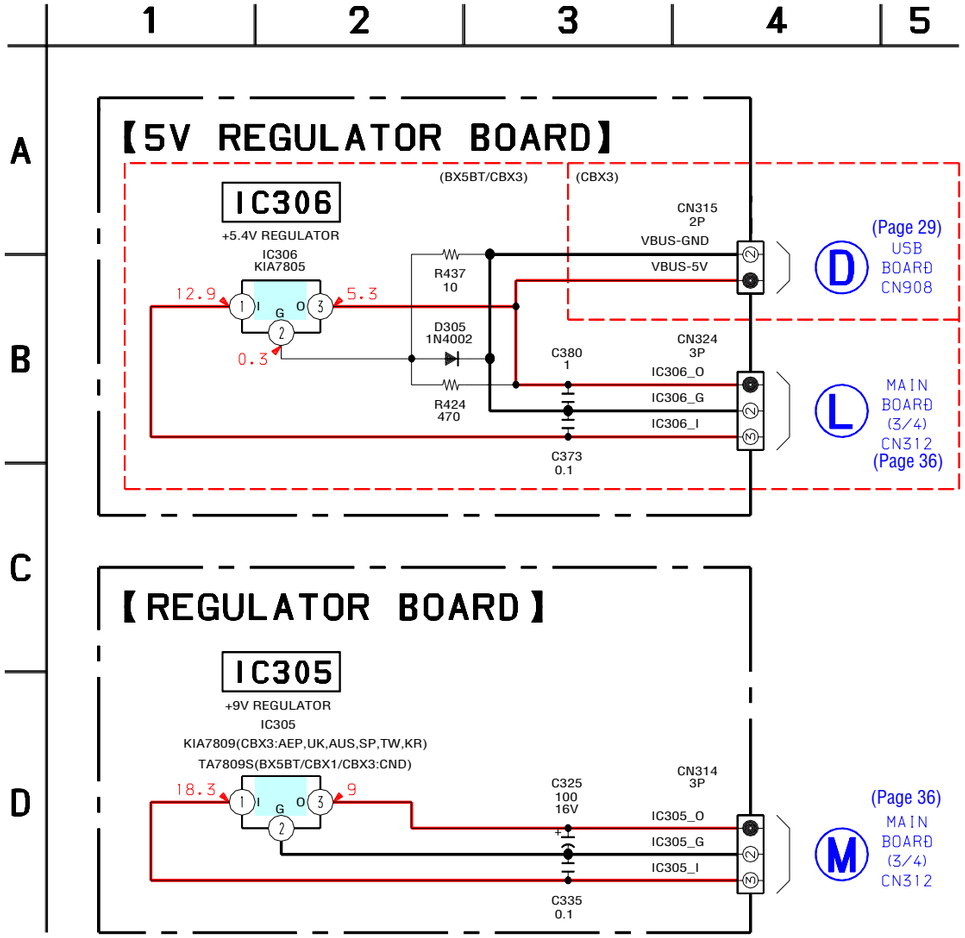


6-11. PRINTED WIRING BOARDS – REGULATOR Section –

• See page 25 for Circuit Boards Location. : Uses unleaded solder.

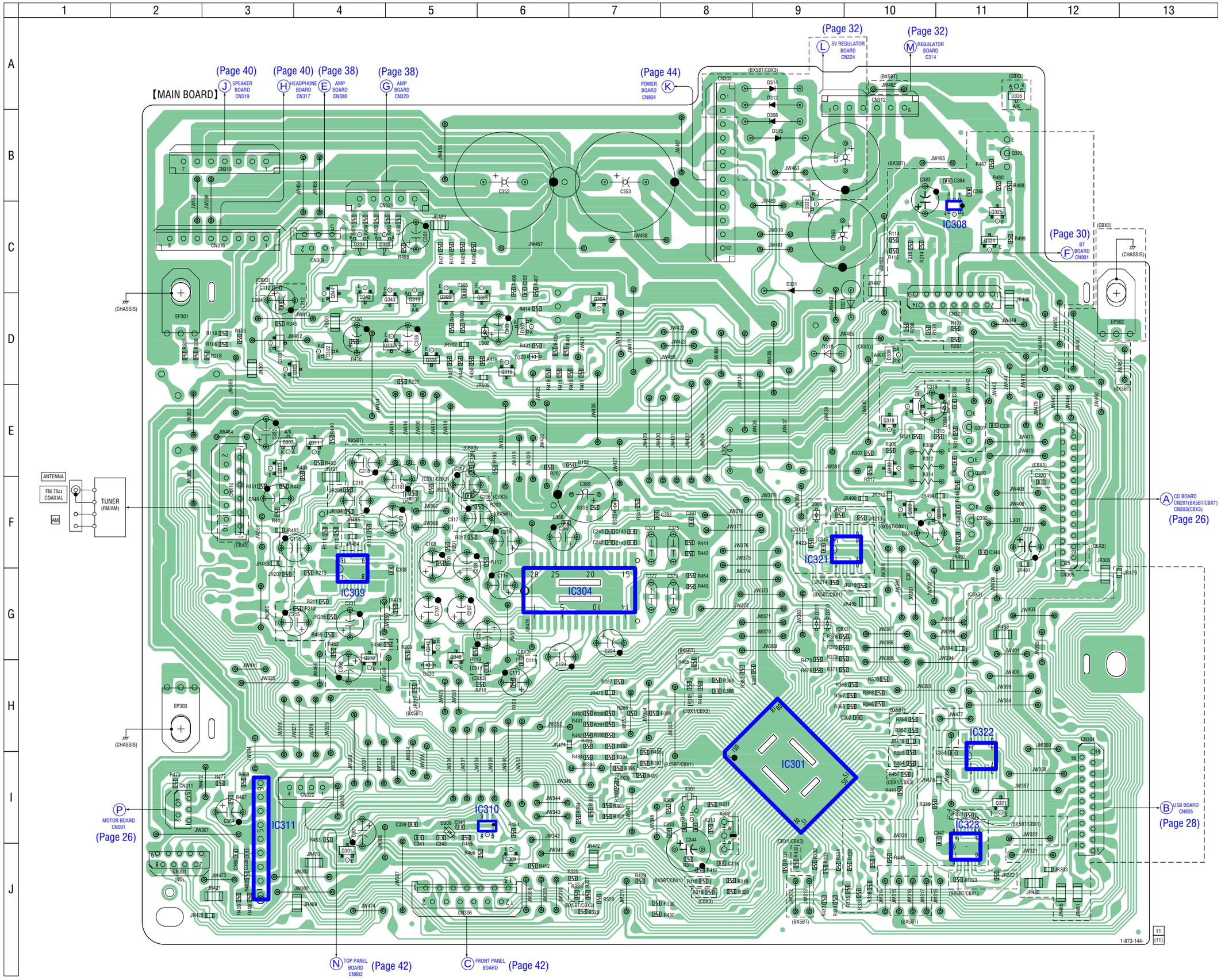


6-12. SCHEMATIC DIAGRAM – REGULATOR Section –



6-13. PRINTED WIRING BOARD – MAIN Board –

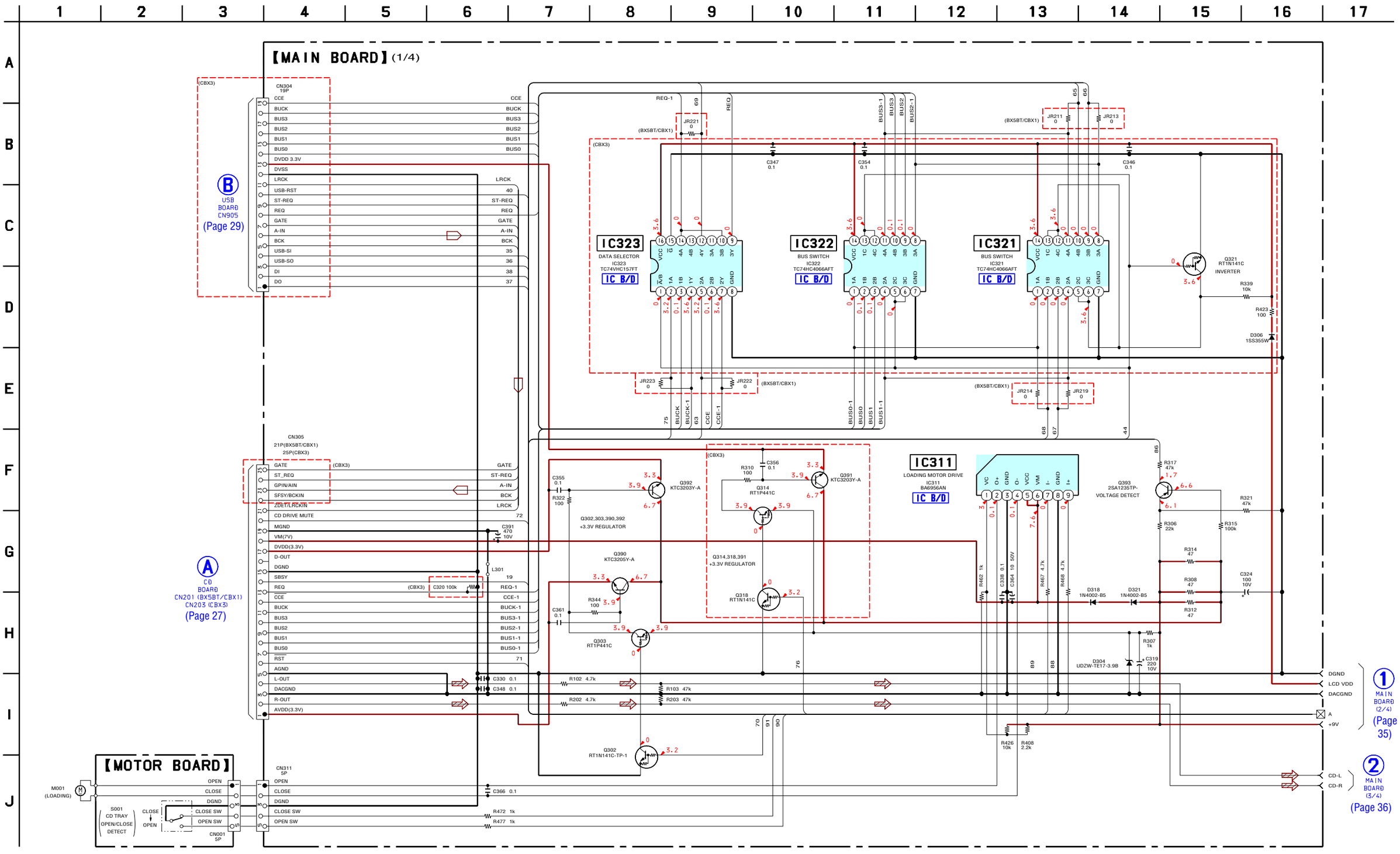
• See page 25 for Circuit Boards Location. : Uses unleaded solder.



- **Semiconductor Location**

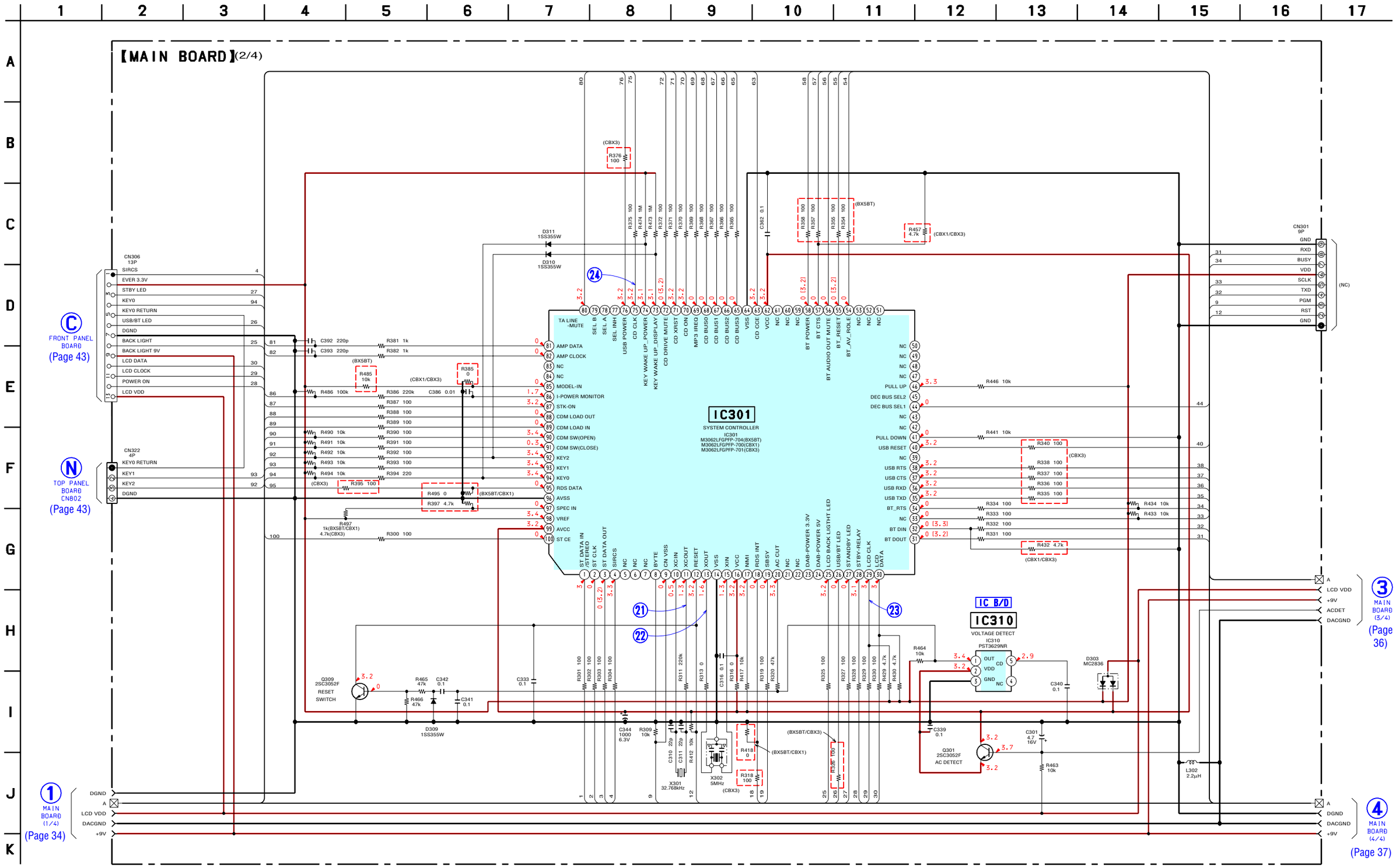
Ref. No.	Location
D302	D-6
D303	D-6
D304	E-11
D306	F-9
D307	E-3
D308	B-9
D309	I-5
D310	G-9
D311	G-9
D312	A-9
D314	A-9
D315	B-9
D318	D-9
D319	D-5
D320	C-4
D321	D-10
D322	D-4
D323	F-7
D324	C-4
D329	D-6
D330	H-5
D331	C-9
D332	C-9
D335	A-11
D336	D-10
IC301	I-9
IC304	G-7
IC308	C-11
IC309	G-4
IC310	I-6
IC311	I-3
IC321	F-10
IC322	I-11
IC323	J-11
Q103	D-4
Q203	D-3
Q301	J-4
Q302	F-10
Q303	F-11
Q304	D-7
Q305	D-5
Q306	D-6
Q309	J-6
Q310	G-4
Q311	E-4
Q313	E-3
Q314	E-10
Q315	D-6
Q318	E-10
Q321	I-11
Q323	B-11
Q324	C-11
Q325	C-11
Q333	D-5
Q338	D-5
Q340	G-5
Q341	G-5
Q342	D-4
Q343	D-5
Q344	D-4
Q390	E-11
Q391	E-11
Q392	F-11
Q393	E-10

6-14. SCHEMATIC DIAGRAM – MAIN Section (1/4) – • See page 46 for IC Block Diagrams.



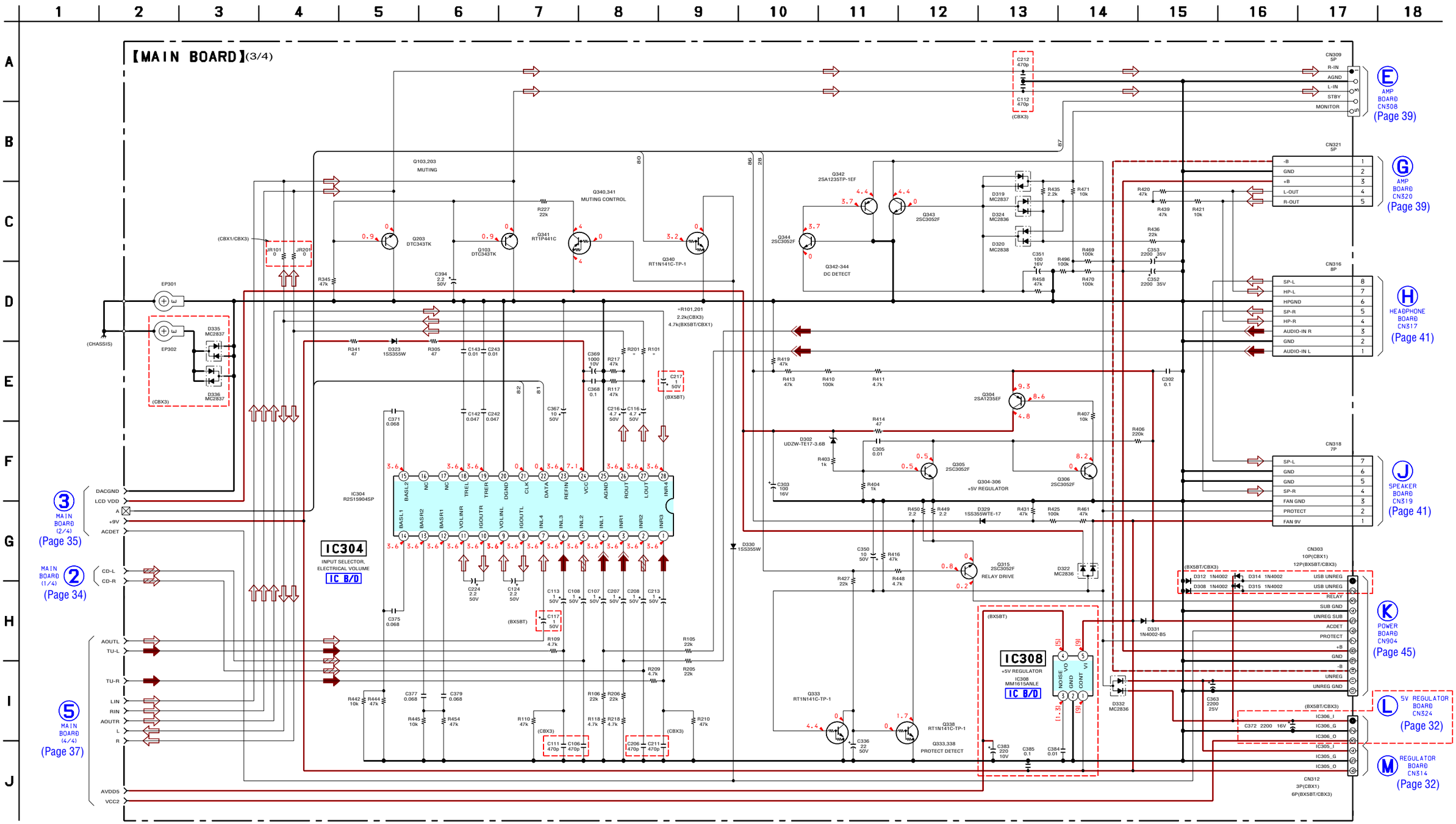
6-15. SCHEMATIC DIAGRAM – MAIN Section (2/4) –

• See page 46 for Waveforms. • See page 46 for IC Block Diagrams. • See page 49 for IC Pin Function Description.



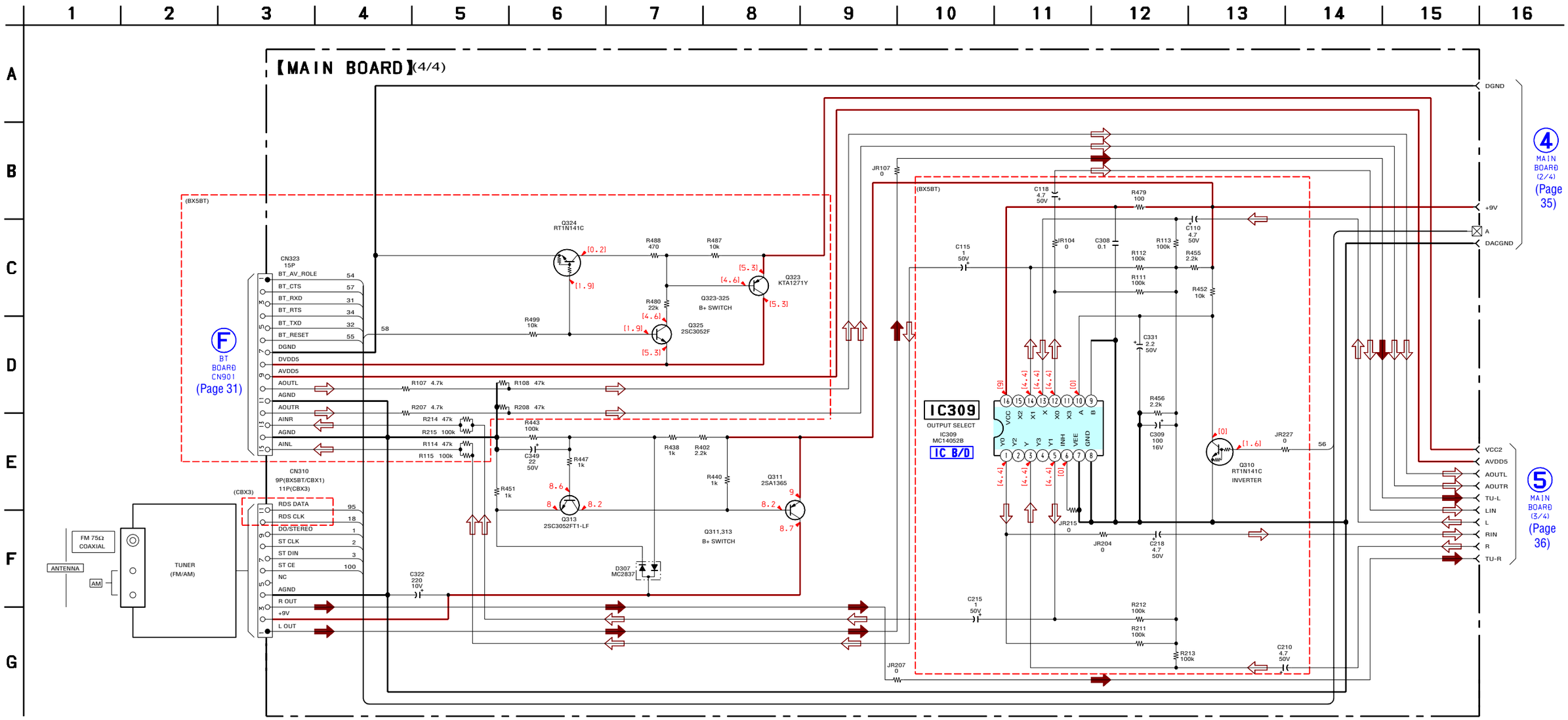
6-16. SCHEMATIC DIAGRAM – MAIN Section (3/4) –

• See page 46 for IC Block Diagrams.



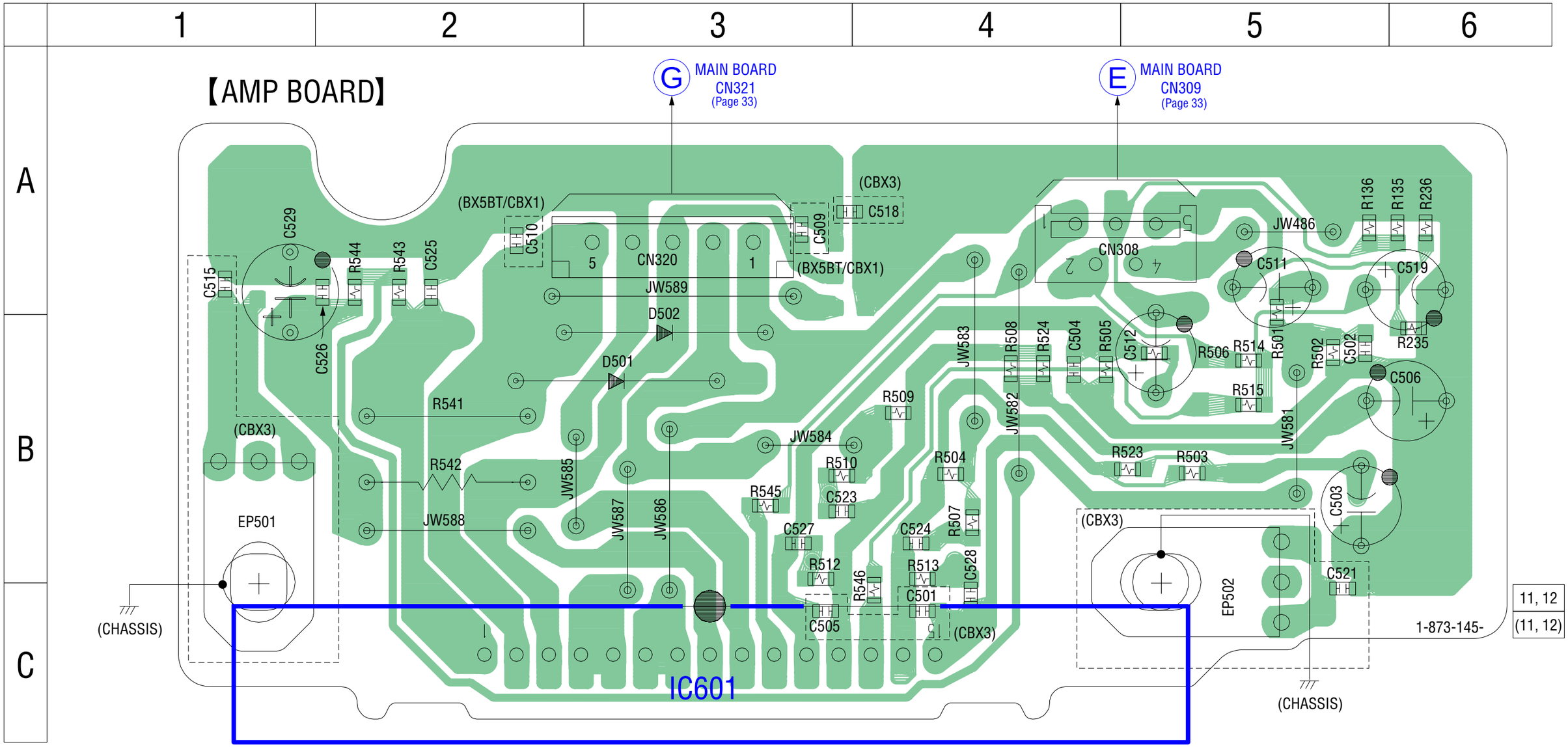
6-17. SCHEMATIC DIAGRAM – MAIN Section (4/4) –

• See page 46 for IC Block Diagrams.

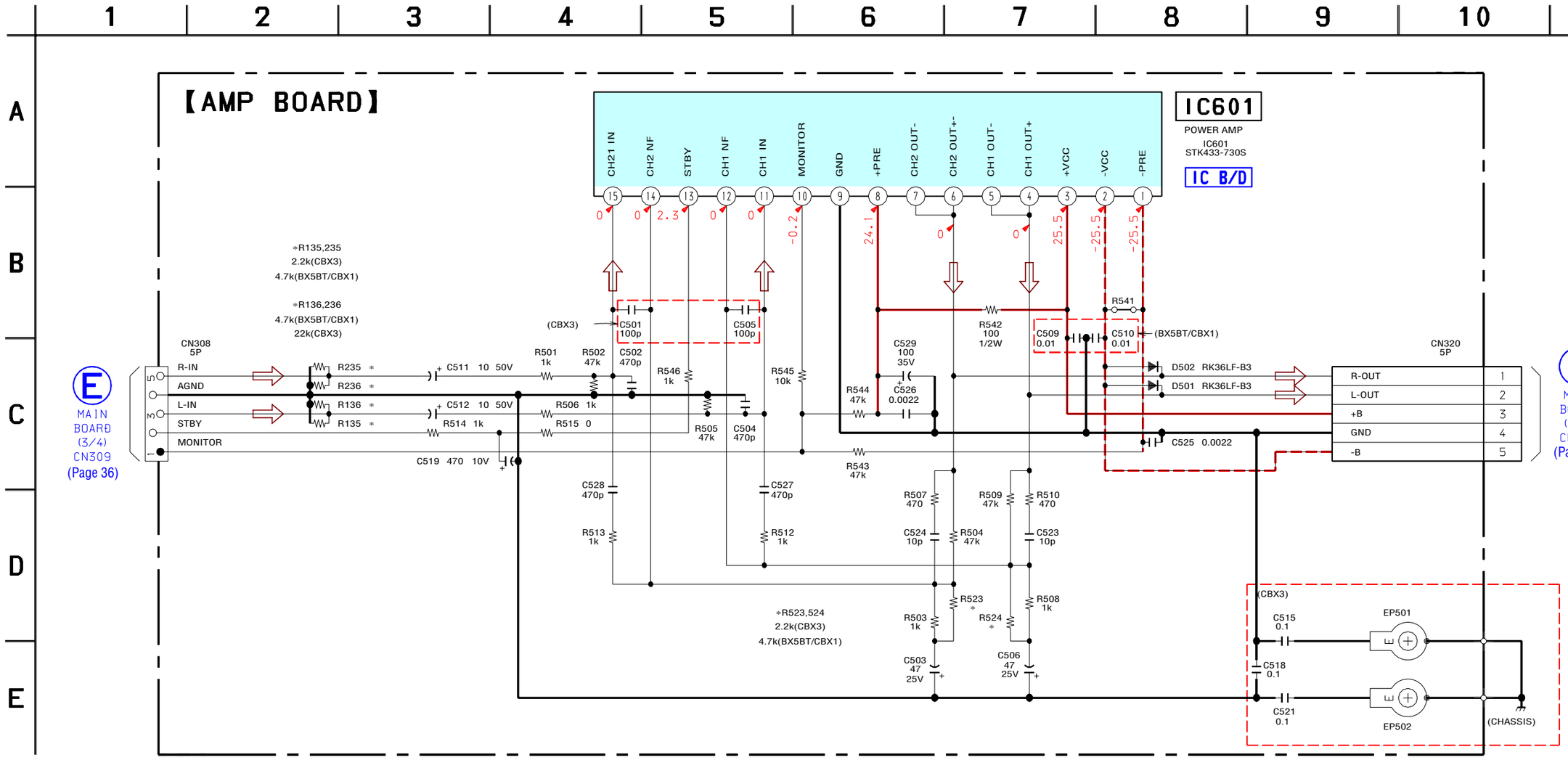


6-18. PRINTED WIRING BOARD – AMP Board –

• See page 25 for Circuit Boards Location. : Uses unleaded solder.

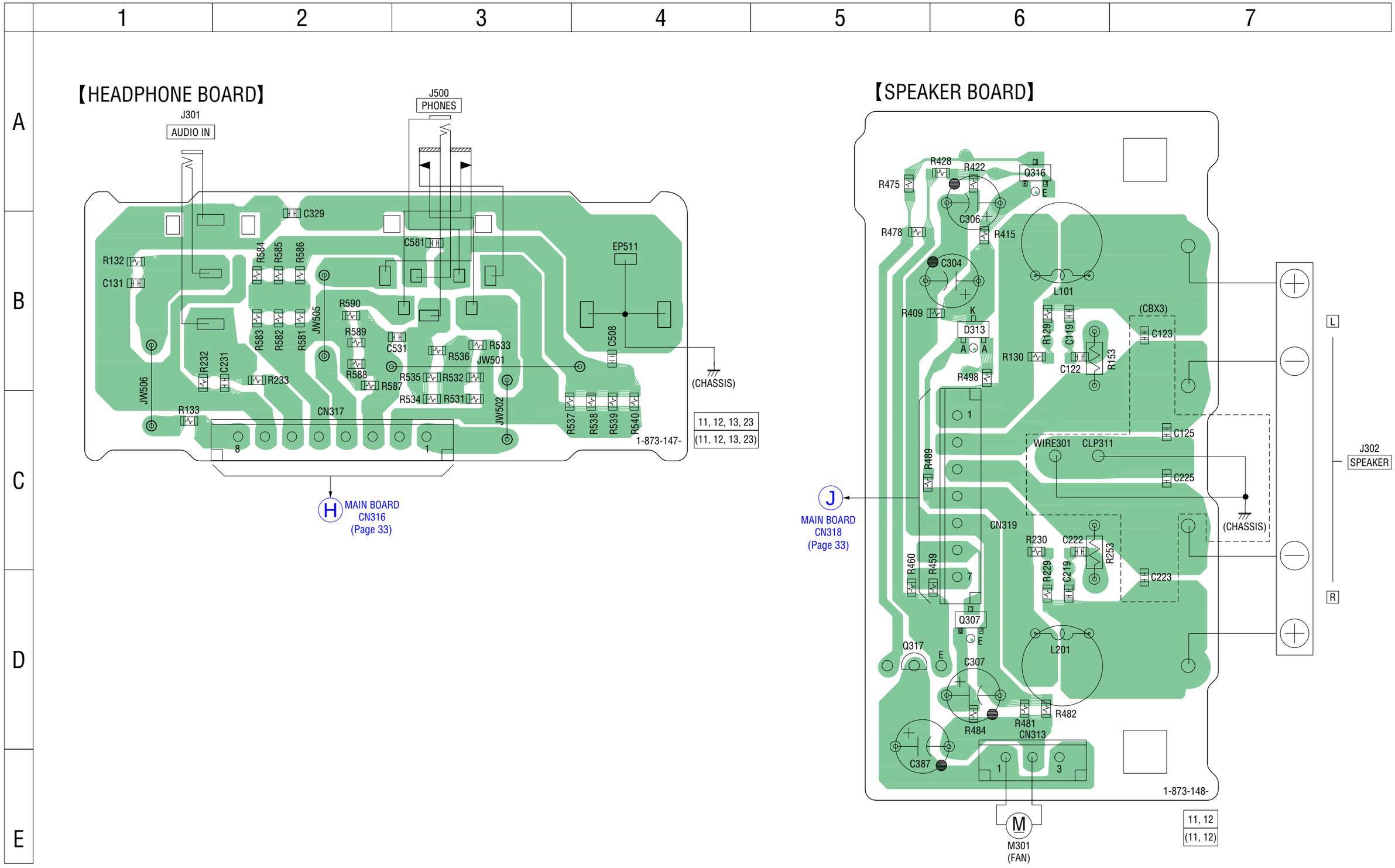


6-19. SCHEMATIC DIAGRAM – AMP Board – • See page 46 for IC Block Diagrams.

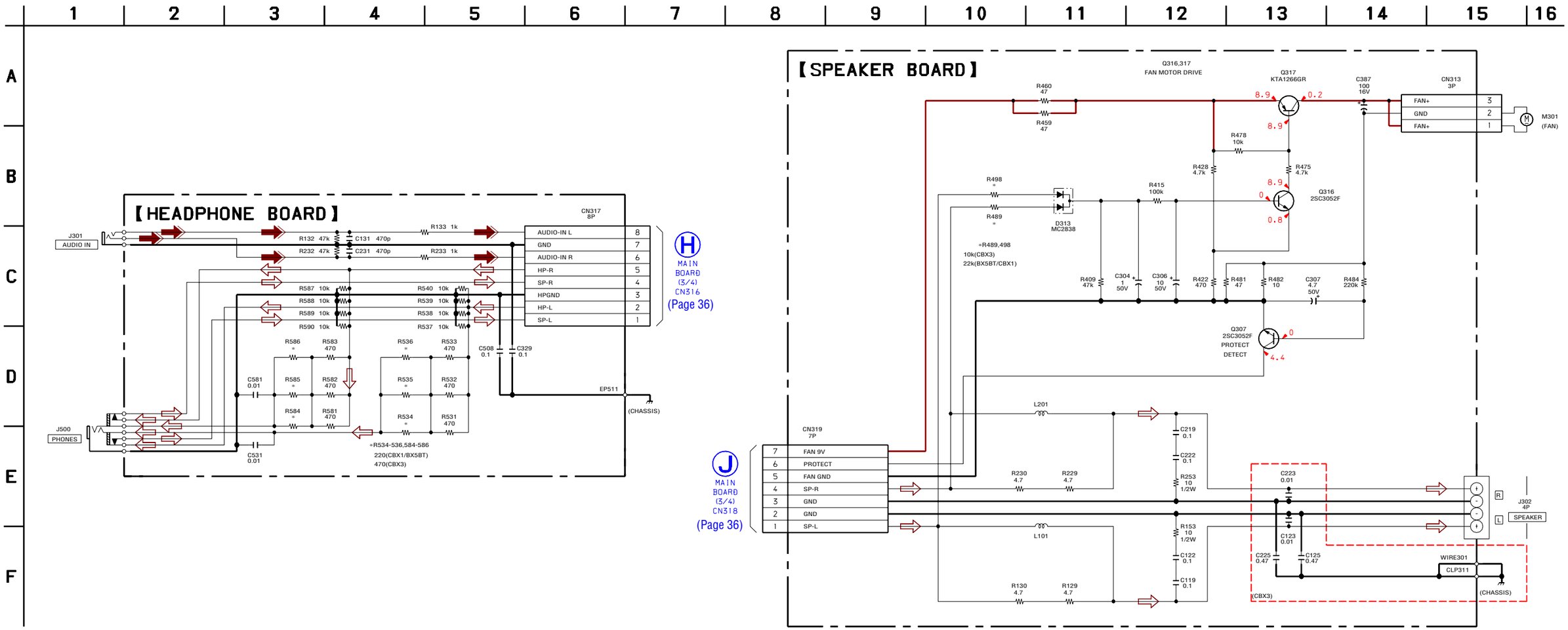


6-20. PRINTED WIRING BOARDS – SPEAKER Section –

• See page 25 for Circuit Boards Location. : Uses unleaded solder.



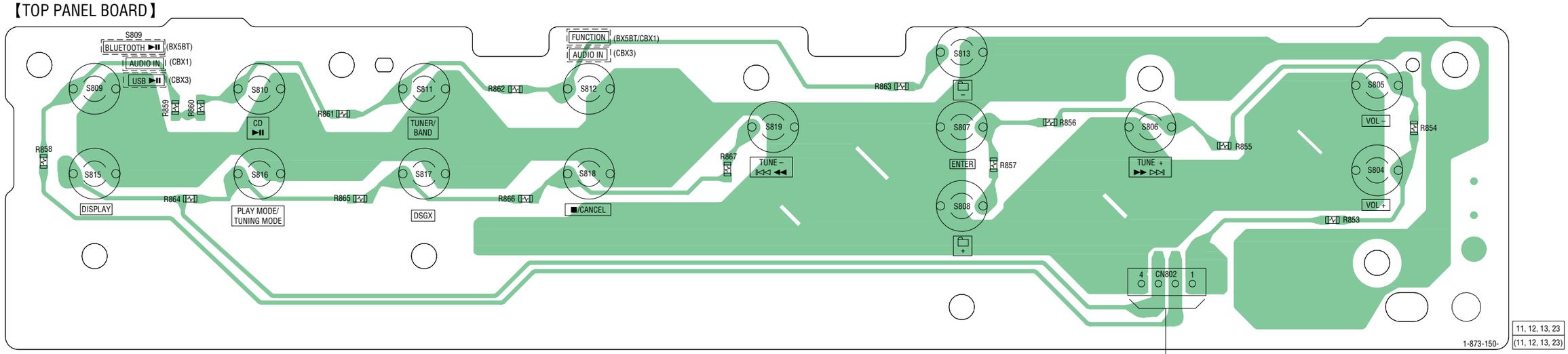
6-21. SCHEMATIC DIAGRAM – SPEAKER Section –



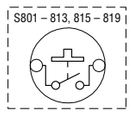
6-22. PRINTED WIRING BOARDS – PANEL Section –

• See page 25 for Circuit Boards Location. : Uses unleaded solder.

【TOP PANEL BOARD】

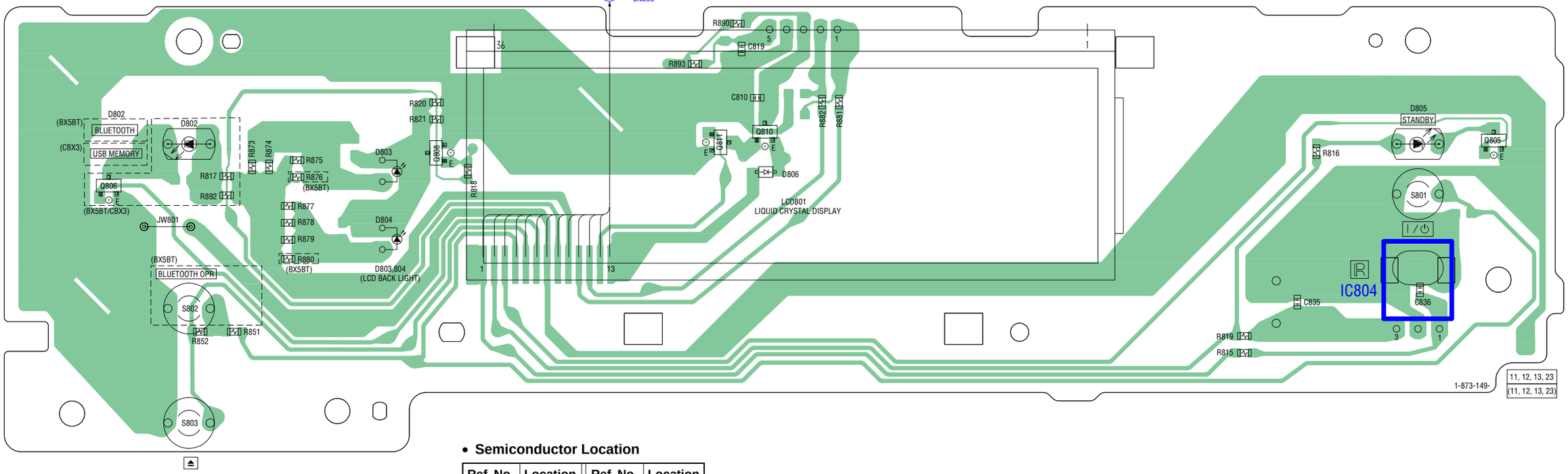


S801 – 813, 815 – 819



N MAIN BOARD CN322 (Page 33)

【FRONT PANEL BOARD】



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D802	E-2		
D803	E-3	Q805	E-11
D804	F-3	Q806	E-1
D805	E-11	Q808	E-4
D806	E-6	Q810	E-6
		Q811	E-6
IC804	F-11		

6-23. SCHEMATIC DIAGRAM – PANEL Section –

【FRONT PANEL BOARD】

IC804
REMOTE CONTROL RECEIVER
IC804
NJL24H400A
VCC OUT GND

LCD801
LIQUID CRYSTAL DISPLAY
VLCD VSS VDD SCL SDA

*D803,804
SELK2E10C-DLF62(BX5BT)
SELU2610C-SLF62(CBX3:CND,AEP,UK(Pearl Silver model),AUS,SP,TW,KR)
SELU2B10A-SLF62(CBX1/CBX3:UK(Gunmetallic model))

S801 S802 (BX5BT) BLUETOOTH OPR S803

R851 1k R852 2.2k C835 1 C836 470p

R819 100 R815 1k

D803,804 (LCD BACK LIGHT) R820 470 R821 1k

D803 * D804 *

(BX5BT)

R873 1k R874 1k R875 1k R876 1k R880 1k R877 1k R878 1k R879 1k C819 0.1

Q808 2SC3052F LED DRIVE

R816 470 R818 4.7k

R881 100 R882 100

1 SIRCS
EVER 3.3V
LED STBY
KEY0
KEY0 RETURN
USB/BT LED
DGND
BACK LIGHT
BACK LIGHT 9V
LCD DATA
LCD CLOCK
POWER ON
LCD VDD
13

(BX5BT/CBX3)
R892 1k R817 1k
D802
SELK5E20C-D(BX5BT)
SLR-325DCT31(CBX3)
BLUETOOTH (BX5BT)
USB MEMORY (CBX3)

D806 1SS355W

D805 SLR-325VCT31P STANDBY

Q805 RT1N141C-TP-1 LED DRIVE

Q806 RT1N141C LED DRIVE

Q810,811 B+ SWITCH

Q811 RT1N141C

Q810 RT1P141C

R893 0(BX5BT) 22k(CBX1/CBX3)

C810 0.1 R890 0

C MAIN BOARD (2/4) CN306 (Page 35)

【TOP PANEL BOARD】

S808 S807 ENTER S806 TUNE + S805 VOL - S804 VOL +

R857 47k R856 22k R855 10k R854 4.7k R853 2.2k

CN802 4P
KEY0 RETURN
KEY1
KEY2
DGND

N MAIN BOARD (2/4) CN322 (Page 35)

S813 S812 (BX5BT/CBX1) FUNCTION AUDIO IN (CBX3) S811 TUNER/ BAND S810 CD S809 AUDIO IN (CBX1) USB (CBX3) BLUETOOTH (BX5BT)

R863 4.7k(CBX3) 10k(BX5BT/CBX1) R862 2.2k(CBX3) 4.7k(BX5BT/CBX1) R861 2.2k R860 1k(CBX3) 2.2k(BX5BT/CBX1) R859 0 R858 *

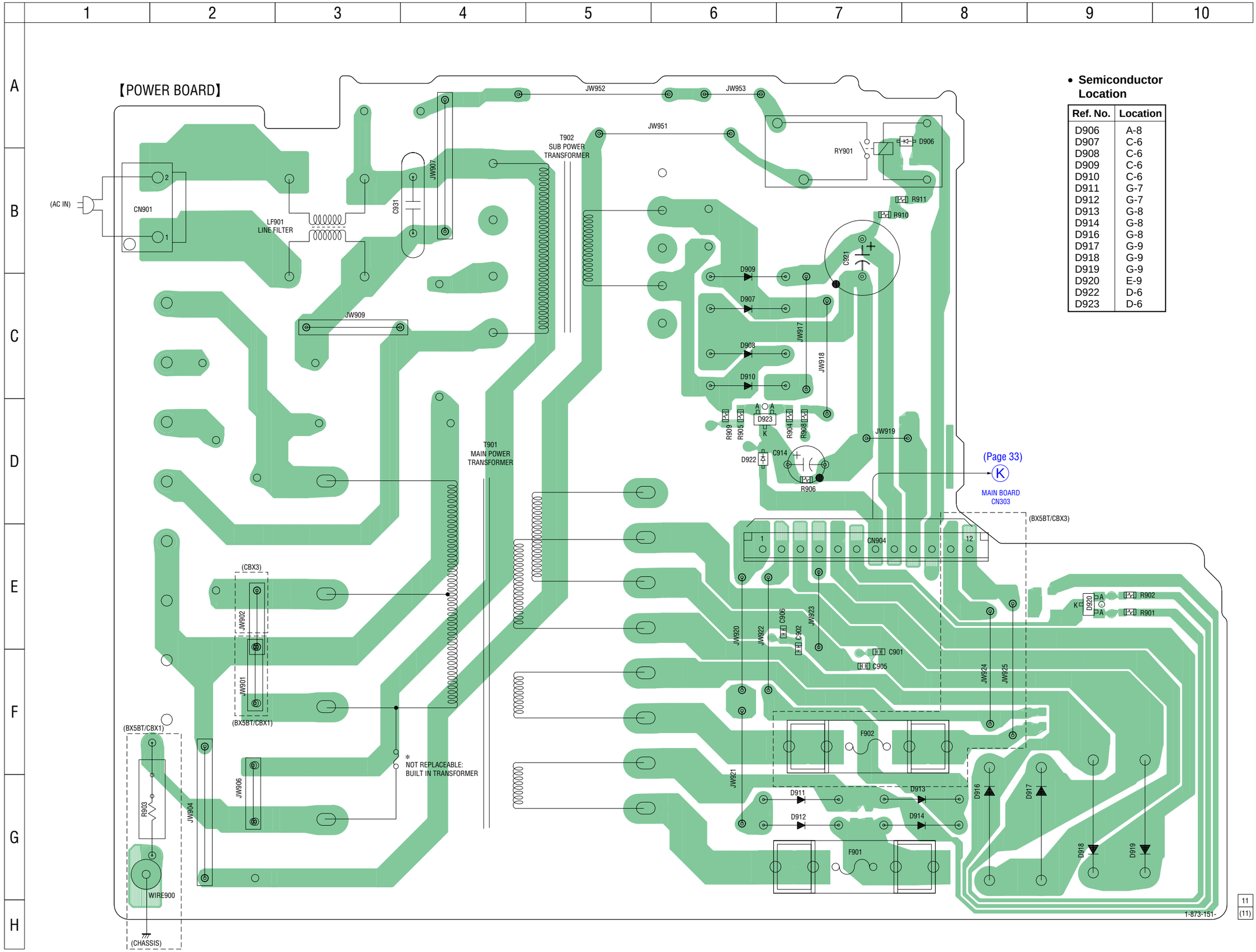
*R858
0(BX5BT/CBX3)
1k(CBX1)

S819 TUNE - S818 /CANCEL S817 DSGX S816 PLAY MODE/ TUNING MODEL S815 DISPLAY

R867 4.7k R866 2.2k R865 2.2k R864 1k

6-24. PRINTED WIRING BOARD – POWER Board –

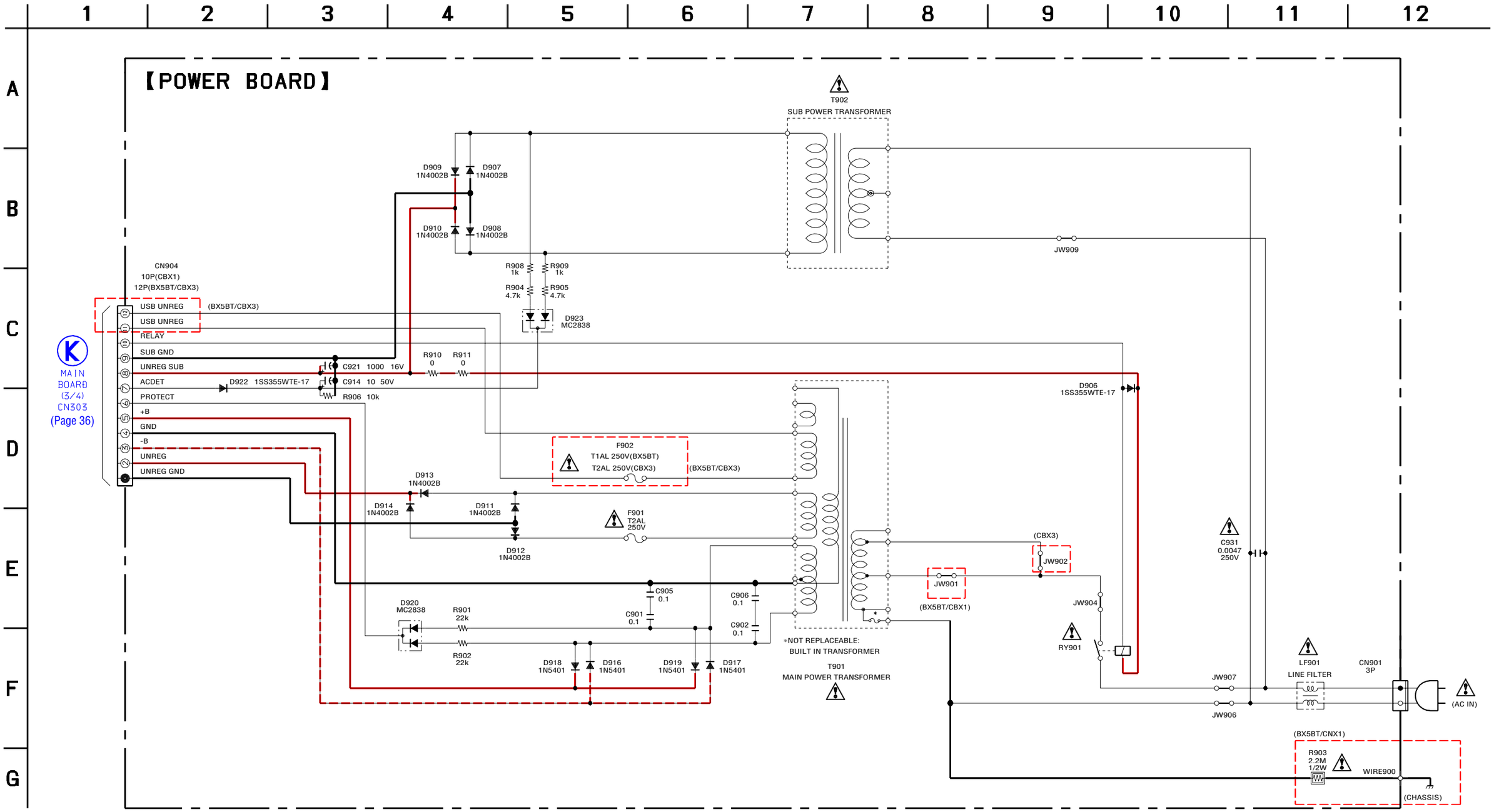
• See page 25 for Circuit Boards Location. : Uses unleaded solder.



- **Semiconductor Location**

Ref. No.	Location
D906	A-8
D907	C-6
D908	C-6
D909	C-6
D910	C-6
D911	G-7
D912	G-7
D913	G-8
D914	G-8
D916	G-8
D917	G-9
D918	G-9
D919	G-9
D920	E-9
D922	D-6
D923	D-6

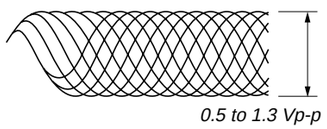
6-25. SCHEMATIC DIAGRAM – POWER Board –



• Waveforms

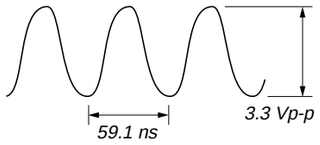
– CD Board –

① IC101 ㊽ (RFi) (CD play mode)



200 mV/DIV, 500 ns/DIV

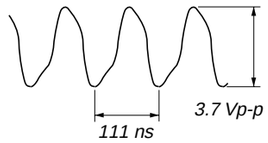
② IC101 ㉔ (XO) (CD play mode)



1 V/DIV, 20 ns/DIV

– USB Board –

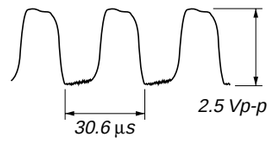
⑪ IC901 ㉝ (X2)



1 V/DIV, 50 ns/DIV

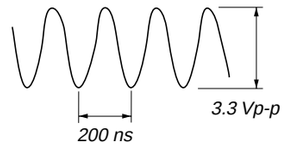
– MAIN Board –

㉑ IC301 ⑪ (XCOUT)



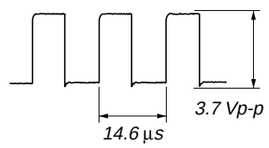
1 V/DIV, 10 µs/DIV

㉒ IC301 ⑬ (XOUT)



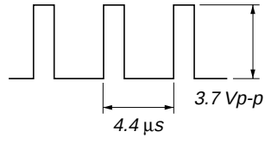
1 V/DIV, 100 ns/DIV

㉓ IC301 ㉙ (LCD CLK)



1 V/DIV, 5 µs/DIV

㉔ IC301 ㉕ (CD CLK) (CD play mode)

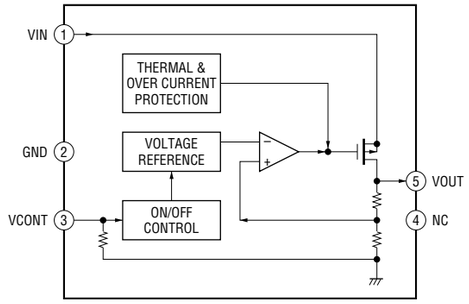


1 V/DIV, 2 µs/DIV

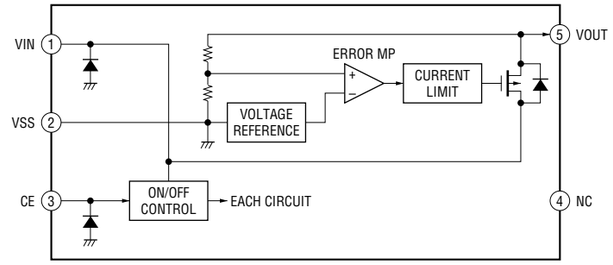
• IC Block Diagrams

– CD Board –

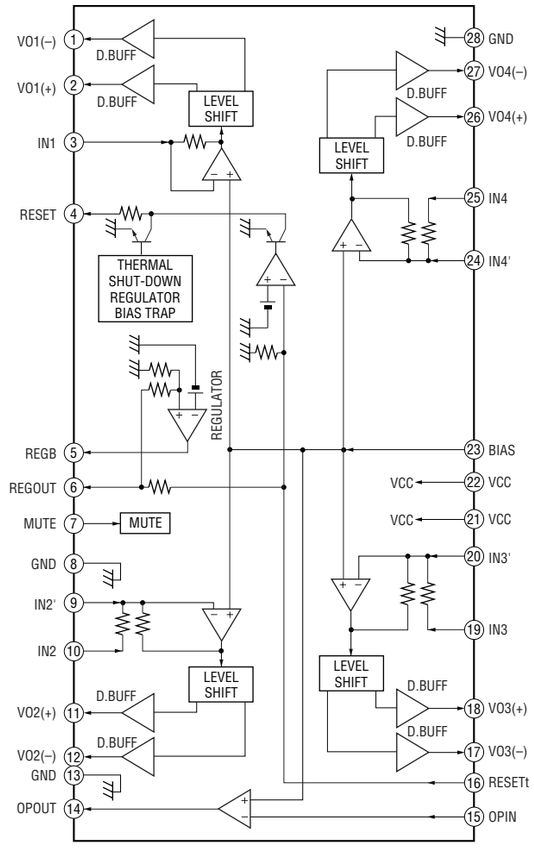
IC201 TK63115SCL-G@GT (BX5BT/CBX1)



IC201 XC6215B152MR (CBX3)

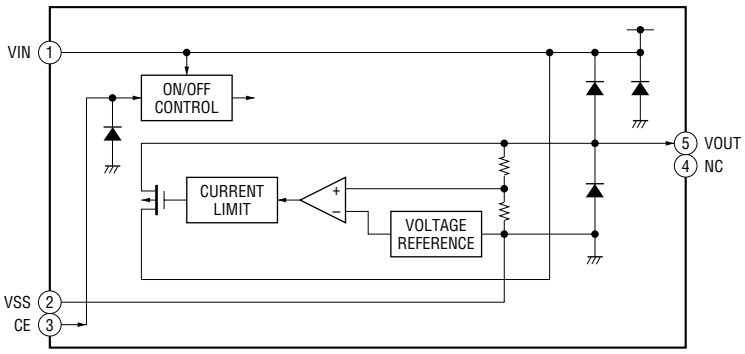


IC401 BA5826SFP-E2



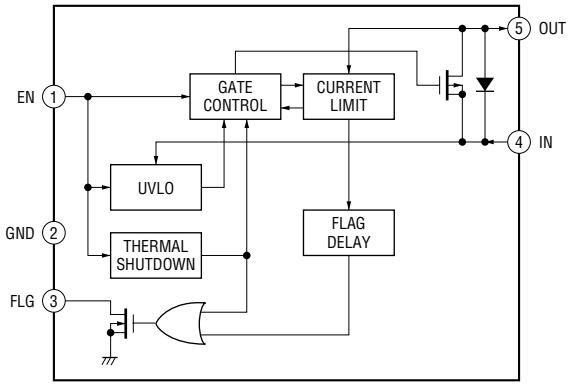
– BT Board –

IC903 XC6213B332MR



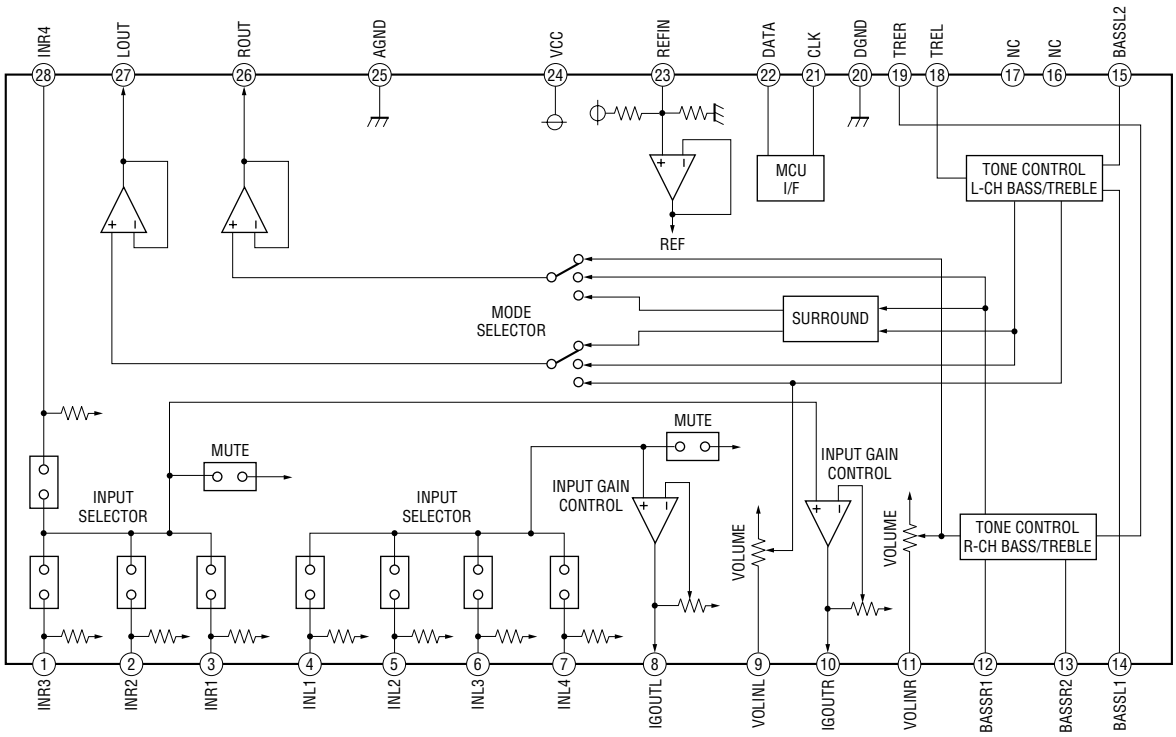
– USB Board –

IC915 R5523N001B-TR-F

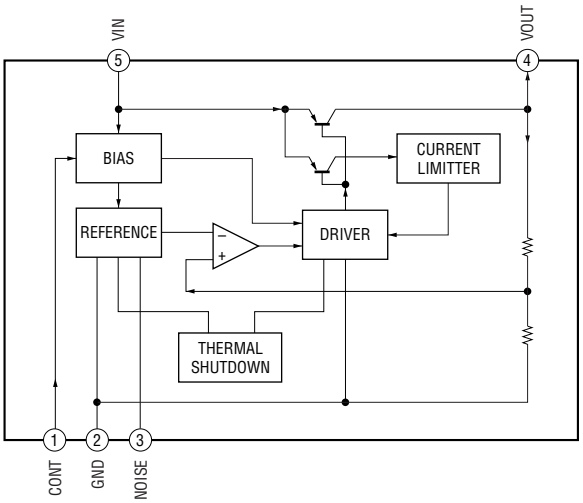


– MAIN Board –

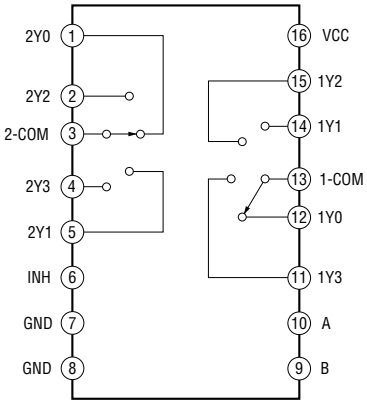
IC304 R2S15904SP



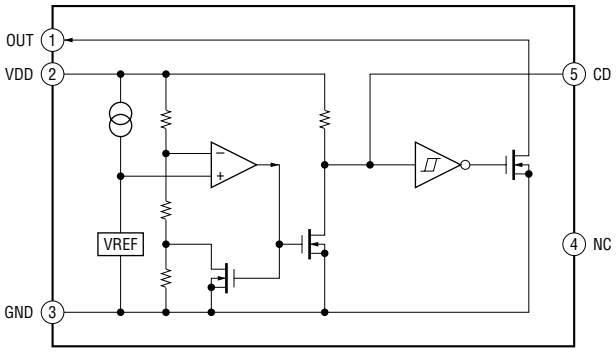
IC308 MM1615ANLE



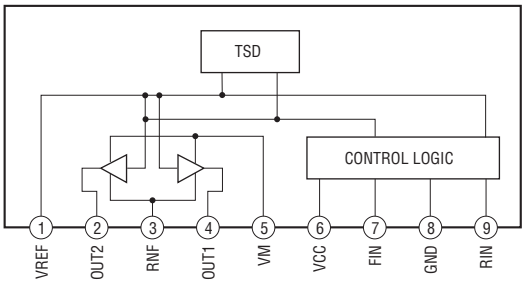
IC309 MC14052BDTR2



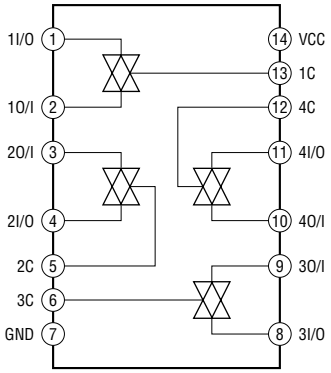
IC310 PST3629NR



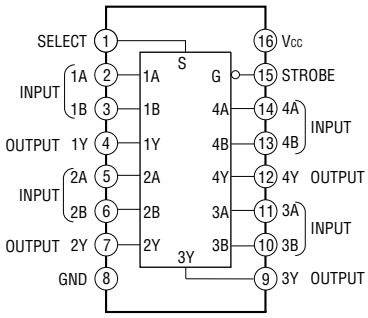
IC311 BA6956AN



IC321, 322 TC74HC4066AFT (EL)

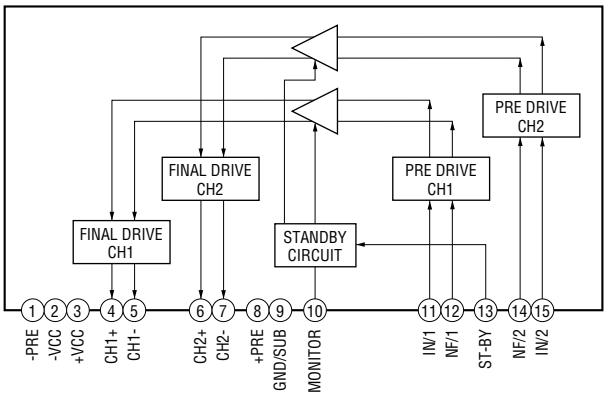


IC323 TC74VHC157FT (EKJ)



– AMP Board –

IC601 STK433-730S-E



- **IC Pin Function Description**

CD BOARD IC101 (CD-MP3 PROCESSOR) TC94A70FG-006 (BX5BT/CBX1),TC94A70FG-007 (S, D) (CBX3)

Pin No.	Pin Name	I/O	Description
1	AVSS3	-	Ground terminal
2	RFZi	I	RF ripple zero crossing signal input terminal
3	RFRP	O	RF ripple signal output terminal
4	SBAD/RFDC	O	Sub beam addition signal or RF peak detection signal output terminal Not used
5	FEi	O	Focus error signal output terminal Not used
6	TEi	O	Tracking error signal output terminal
7	TEZi	I	Tracking error zero crossing signal input terminal
8	AVDD3	-	Power supply terminal (+3.3 V)
9	FOo	O	Focus coil drive signal output terminal
10	TRo	O	Tracking coil drive signal output terminal
11	VREF	I	Reference voltage (+1.65V) input terminal
12	FMo	O	Sled motor drive signal output terminal
13	DMo	O	Spindle motor drive signal output terminal
14	VSSP3	-	Ground terminal
15	VCOi	I	VCO control voltage input terminal
16	VDDP3	-	Power supply terminal (+3.3 V)
17	VDD1	-	Power supply terminal (+1.5 V)
18	VSS	-	Ground terminal
19	FGiN	I	FG signal input terminal Not used
20	IO0 (/HSO)	I	Disc inner position detection signal input terminal
21	IO1 (/UHSO)	O	Not used
22	XVSS3	-	Ground terminal
23	XI	I	System clock input terminal (16.9344 MHz)
24	XO	O	System clock output terminal (16.9344 MHz)
25	XVDD3	-	Power supply terminal (+3.3 V)
26	DVSS3	-	Ground terminal
27	RO	O	Audio data (R-ch) output to the input selector
28	DVDD3	-	Power supply terminal (+3.3 V)
29	DVR	O	Reference voltage (+1.65V) output terminal
30	LO	O	Audio data (L-ch) output to the input selector
31	DVSS3	-	Ground terminal
32	VDDT3	-	Power supply terminal (+3.3 V)
33	VSS1	-	Ground terminal
34	VDD1	-	Power supply terminal (+1.5 V)
35	VDDM1	-	Power supply terminal (+1.5 V)
36	SRAMSTB	I	S-RAM standby mode control signal input terminal Fixed at "L" in this set
37	XRST	I	Reset signal input from the system controller "L": reset
38, 39	BUS0, BUS1	I	Serial data input from the system controller and USB controller (CBX3) Serial data input from the system controller (BX5BT/CBX1)
40	BUS2 (SO)	I	Serial data input from the system controller and USB controller (CBX3) Serial data input from the system controller (BX5BT/CBX1)
41	BUS3 (SI)	I	Serial data input from the system controller and USB controller (CBX3) Serial data input from the system controller (BX5BT/CBX1)
42	BUCK (CLK)	I	Serial data transfer clock signal input from the system controller and USB controller (CBX3) Serial data transfer clock signal input from the system controller (BX5BT/CBX1)
43	XCCE	I	Chip enable signal input from the system controller and USB controller (CBX3) Chip enable signal input from the system controller (BX5BT/CBX1)

Pin No.	Pin Name	I/O	Description
44	TEST	I	Setting terminal for test mode Normally fixed at "L"
45	IRQ	I	Interrupt request signal input terminal Not used
46	AoUT3 (PO4)	O	Request signal output to the USB controller (CBX3)
47	AoUT2 (PO5)	O	Audio data output terminal Not used
48	PIO0	O	Request signal output to the system controller and USB controller (CBX3) Request signal output to the system controller (BX5BT/CBX1)
49, 50	PIO1, PIO2	O	Not used
51	PIO3	I	Gate signal input from the USB controller (CBX3)
52	VSS1	-	Ground terminal
53	VDDT3	-	Power supply terminal (+3.3 V)
54	SBSY	O	Subcode block sync signal output to the system controller
55	SBOK/FOK	O	Not used
56	IPF	O	Not used
57	SFSY/LOCK	O	Not used
58	ZDET	O	Zero detection signal output terminal Not used
59	GPIN	I	Not used
60	MS	I	Microcomputer interface mode selection signal input terminal Fixed at "H" in this set
61	DOUT (PO6)	O	Digital audio data output terminal Not used
62	AOUT (PO7)	O	Audio data output terminal Not used
63	BCK (PO8)	O	Bit clock signal output terminal Not used
64	LRCK (PO9)	O	L/R sampling clock signal output terminal Not used
65	AIN (PI4)	I	Digital audio data input from USB controller (CBX3)
66	BCKi (PI5)	I	Bit clock signal input from the USB controller (CBX3)
67	LRCKi (PI6)	I	L/R sampling clock signal input from the USB controller (CBX3)
68	VDD1	-	Power supply terminal (+1.5 V)
69	VSS	-	Ground terminal
70	AWRC	-	Not used
71	PVDD3	-	Power supply terminal (+3.3 V)
72	PDO	O	Phase error margin signal between EFM signal and PLCK signal output terminal
73	TMAXS	O	TMAX detection signal output terminal Not used
74	TMAX	O	TMAX detection signal output terminal
75	LPFN	I	Inverted signal input from the operation amplifier for PLL loop filter
76	LPFo	O	Signal output from the operation amplifier for PLL loop filter
77	PVREF	I	Reference voltage (+1.65V) input terminal
78	VCOF	O	VCO filter output terminal
79	PVSS3	-	Ground terminal
80	SLCo	O	EFM slice level output terminal
81	RFi	I	RF signal input terminal
82	RFRPi	I	RF ripple signal input terminal
83	RFEQo	O	EFM slice level output terminal
84	VRo	O	Reference voltage (+1.65V) output terminal
85	RESiN	O	External resistor connection terminal
86	VMDiR	O	Reference voltage (+1.65V) output terminal for automatic power control circuit
87	TESTR	O	Low-pass filter terminal for RFEQO offset correction
88	AGCi	I	RF signal amplitude adjustment amplification input terminal
89	RFo	O	RF signal generation amplification output terminal
90	RVDD3	-	Power supply terminal (+3.3 V)

Pin No.	Pin Name	I/O	Description
91	LDo	O	Laser diode on/off control signal output to the automatic power control circuit "H": laser diode on
92	MDi	I	Light amount monitor input from the laser diode of optical pick-up block
93	RVSS3	-	Ground terminal
94	FNi2 (C)	I	Main beam (C) input from the optical pick-up block
95	FNi1 (A)	I	Main beam (A) input from the optical pick-up block
96	FPi2 (D)	I	Main beam (D) input from the optical pick-up block
97	FPi1 (B)	I	Main beam (B) input from the optical pick-up block
98	TPi (F)	I	Sub beam (F) input from the optical pick-up block
99	TNPC	O	External capacitor connection terminal
100	TNi (E)	I	Sub beam (E) input from the optical pick-up block

USB BOARD IC901 TMP92CD28FG-2CB2 (USB CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	/RESET	I	Reset signal input from the system controller "L": reset
2	DI	I	Ready to send signal input from the system controller
3, 4	NO USE	O	Not used
5	G-3	I	Function selection signal input terminal Fixed at "L" in this set
6	DVCC	-	Power supply terminal (+3.3 V)
7 to 9	NO USE	O	Not used
10	DVSS	-	Ground terminal
11	DVCC	-	Power supply terminal (+3.3 V)
12	RVOUT1	O	Reference voltage (+3.3 V) output terminal
13, 14	RVIN	I	Reference voltage (+3.3 V) input terminal
15	RVOUT2	O	Reference voltage (+3.3 V) output terminal
16	DVCC	-	Power supply terminal (+3.3 V)
17	DVSS	-	Ground terminal
18 to 25	D0 to D7	I/O	Two-way data bus with the S-RAM
26	DVSS	-	Ground terminal
27	DVCC	-	Power supply terminal (+3.3 V)
28 to 35	D8 to D15	I/O	Two-way data bus with the S-RAM
36	A0	O	Address signal output terminal Not used
37 to 43	A1 to A7	O	Address signal output to the S-RAM
44	DVSS	-	Ground terminal
45	DVCC	-	Power supply terminal (+3.3 V)
46 to 54	A8 to A16	O	Address signal output to the S-RAM
55 to 58	BUS0 to BUS3	O	Serial data output to the CD-MP3 processor
59	/BUCK	O	Serial data transfer clock signal output to the CD-MP3 processor
60	/CCE	O	Chip enable signal output to the CD-MP3 processor
61	NO USE	O	Not used
62	DVSS	-	Ground terminal
63	DVCC	-	Power supply terminal (+3.3 V)
64	RD	O	Output enable signal output to the S-RAM
65	WR	O	Write enable signal output to the S-RAM
66	SRLLB	O	Lower-byte control signal output to the S-RAM
67	SRLUB	O	Upper-byte control signal output to the S-RAM
68	NO USE	O	Not used
69	BOOT	I	Boot mode selection signal input terminal "L": boot mode
70	CS2	I	Chip select signal output to the S-RAM
71	LRCK	O	L/R sampling clock signal output to the CD-MP3 processor
72	AM1	I	Function mode selection signal input terminal Fixed at "H" in this set
73	X2	O	System clock output terminal (9 MHz)
74	DVSS	-	Ground terminal
75	X1	I	System clock input terminal (9 MHz)
76	DVCC	-	Power supply terminal (+3.3 V)
77	USBOC	I	Over current detection signal input terminal
78	USBPON	O	USB VBUS power on/off control signal output terminal "H": power on
79	D+	I/O	Two-way data (positive) bus with the USB connector
80	D-	I/O	Two-way data (negative) bus with the USB connector
81	AM0	I	Function mode selection signal input terminal Fixed at "H" in this set

Pin No.	Pin Name	I/O	Description
82	NO USE	O	Not used
83	DVSS	-	Ground terminal
84	DO	O	Clear to send signal output to the system controller
85	DATA	O	Serial data output terminal Not used
86	CLOCK	O	Serial data transfer clock signal output terminal Not used
87	TXD1	O	Serial data output to the system controller
88	RXD1	I	Serial data input from the system controller
89	NO USE	O	Not used
90	SDA	I/O	Two-way EEPROM IIC data bus terminal Not used
91	SCL	I/O	Two-way EEPROM IIC clock bus terminal Not used
92	BCK	O	Bit clock signal output to the CD-MP3 processor
93	DATA	O	Audio data output to the CD-MP3 processor
94	GATE	O	Gate signal output to the CD-MP3 processor
95	DVCC	-	Power supply terminal (+3.3 V)
96	REQ	I	Request signal input from the CD-MP3 processor
97	ST-REQ	I	Request signal input from the CD-MP3 processor
98, 99	G-1, G-2	I	Function selection signal input terminal Fixed at "L" in this set
100	DVSS	-	Ground terminal

MAIN BOARD IC301 M3062LFGPFP-704 (BX5BT) (SYSTEM CONTROLLER)
M3062LFGPFP-700 (CBX1) (SYSTEM CONTROLLER)
M3062LFGPFP-701 (CBX3) (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	ST DATA IN /STEREO	I	Serial data and stereo detection signal input from the tuner (FM/AM)
2	ST CLK	O	Serial data transfer clock signal output to the tuner (FM/AM)
3	ST DATA OUT	O	Serial data output to the tuner (FM/AM)
4	SIRCS	I	SIRCS signal input from the remote control receiver
5 to 7	NC	O	Not used
8	BYTE	I	External data bus width selection signal input terminal
9	CN VSS	I	Processor mode switch input terminal (for test)
10	XCIN	I	Sub system clock input terminal (32.768 kHz)
11	XCOUT	O	Sub system clock output terminal (32.768 kHz)
12	RESET	I	System reset signal input from the reset signal generator "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
13	XOUT	O	Main system clock output terminal (5 MHz)
14	VSS	-	Ground terminal
15	XIN	I	Main system clock input terminal (5 MHz)
16	VCC	-	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt signal input terminal Not used
18	RDS INT	I	RDS data transfer clock signal input from the tuner (FM/AM) (CBX3)
19	SBSY	I	Subcode block sync signal input from the CD-MP3 processor
20	AC CUT	I	AC cut on/off detection signal input terminal "L": AC cut on
21, 22	NC	O	Not used
23	DAB-POWER 3.3V	O	DAB power supply (+3.3V) ON/OFF control signal output terminal Not used
24	DAB-POWER 5V	O	DAB power supply (+5V) ON/OFF control signal output terminal Not used
25	LCD BACK LIGHT LCD	O	LED drive signal output terminal for LCD back light "H": LED on
26	USB/BT LED	O	LED drive signal output terminal for BLUETOOTH indicator (BX5BT) or USB MEMORY indicator (CBX3) "H": LED on
27	STANDBY LED	O	LED drive signal output terminal for STANDBY indicator "H": LED on
28	STBY RELAY	O	Power on/off control signal output terminal "H": power on
29	LCD CLK	O	Serial data transfer clock signal output to the liquid crystal display
30	LCD DATA	O	Serial data output to the liquid crystal display
31	BT DOUT	O	Serial data output to the bluetooth module (BX5BT)
32	BT DIN	O	Serial data input from the bluetooth module (BX5BT)
33	NC	O	Not used
34	BT_RTS	O	Ready to send signal output to the bluetooth module (BX5BT)
35	USB TXD	O	Serial data output to the USB controller (CBX3)
36	USB RXD	I	Serial data input from the USB controller (CBX3)
37	USB_CTS	I	Clear to send signal input from the USB controller (CBX3)
38	USB_RTS	O	Ready to send signal output to the USB controller (CBX3)
39	NC	O	Not used
40	USB RESET	O	Reset signal output to the USB controller "L": reset (CBX3)
41	PULL DOWN	O	Connected to the ground
42, 43	NC	O	Not used
44	DEC BUS SEL1	O	Data selection signal output terminal (CBX3)

Pin No.	Pin Name	I/O	Description
45	DEC BUS SEL2	O	Data selection signal output terminal Not used
46	PULL UP	O	Connected to the power supply
47 to 53	NC	O	Not used
54	BT_AV_ ROLE	O	Transmission/reception mode notification signal output to the bluetooth module (BX5BT)
55	BT_RESET	O	Reset signal output to the bluetooth module "L": reset (BX5BT)
56	BT AUDIO OUT MUTE	O	Blutetooth muting on/off control signal output terminal "H": muting on (BX5BT)
57	BT CTS	I	Clear to send signal input from the bluetooth module (BX5BT)
58	BT POWER	O	Power on/off control signal output terminal for bluetooth section "H": power on (BX5BT)
59 to 61	NC	O	Not used
62	VCC	-	Power supply terminal (+3.3V)
63	CD CCE	O	Chip enable signal output to the CD-MP3 processor
64	VSS	-	Ground terminal
65 to 68	CD BUS3 to CD BUS0	O	Serial data output to the CD-MP3 processor
69	MP3 IREQ	I	Request signal input from the CD-MP3 processor
70	CD ON	O	Power on/off control signal output terminal for CD section "H": power on
71	CD XRST	O	Reset signal output to the CD-MP3 processor "L": reset
72	CD DRIVE MUTE	O	Muting signal output to the coil/motor driver
73	KEY WAKE UP_DISPLAY	I	Wake up signal input terminal
74	KEY WAKE UP_POWER	I	Wake up signal input terminal
75	CD CLK	O	Serial data transfer clock signal output to the CD-MP3 processor
76	USB POWER	O	Power on/off control signal output terminal for USB section "H": power on (CBX3)
77	SEL INH	O	Input selection control signal output terminal Not used
78	SEL A	O	Input selection control signal output terminal Not used
79	SEL B	O	Input selection control signal output terminal Not used
80	TA LINE-MUTE	O	Line muting on/off control signal output terminal "H": muting on
81	AMP DATA	O	Serial data output to the electrical volume
82	AMP CLOCK	O	Serial data transfer clock signal output to the electrical volume
83, 84	NC	O	Not used
85	MODEL IN	I	Setting terminal for the model
86	I-POWER MONITOR	I	Power monitor input terminal
87	STK-ON	O	Standby control signal output to the power amplifier
88	CDM LOAD OUT	O	Loading motor control signal output terminal (for loading out)
89	CDM LOAD IN	O	Loading motor control signal output terminal (for loading in)
90	CDM SW(OPEN)	I	Disc tray open position detection signal input terminal
91	CDM SW (CLOSE)	I	Disc tray close position detection signal input terminal
92 to 94	KEY2 to KEY0	I	Top and front panel key input terminal (A/D input)
95	RDS DATA	I	RDS data input from the tuner (FM/AM) (CBX3)
96	AVSS	-	Ground terminal
67	SPEC IN	I	Setting terminal for the destination
98	VREF	I	Reference voltage (+3.3V) input terminal
99	AVCC	-	Power supply terminal (+3.3V)
100	ST CE	O	Chip enable signal output to the tuner (FM/AM)

SECTION 7
EXPLODED VIEWS

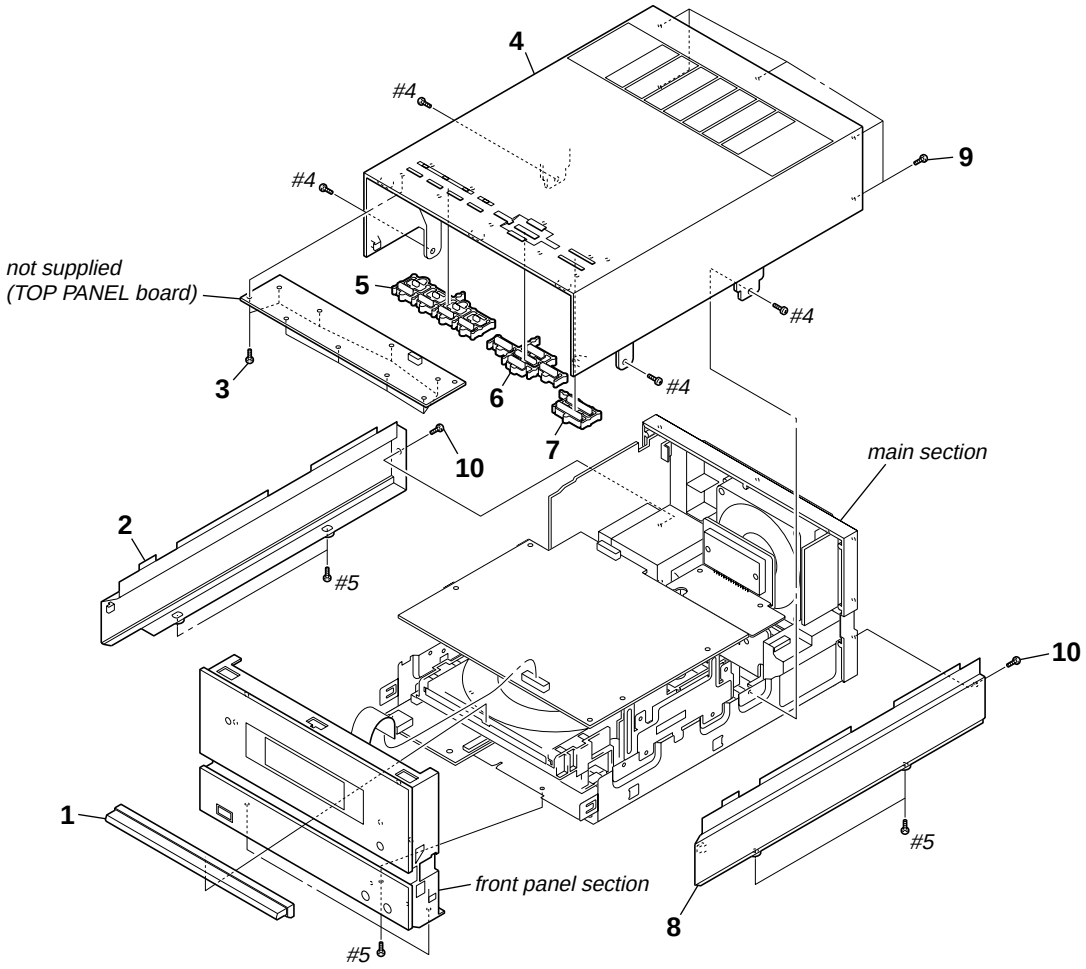
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  KR : Korean model
  SP : Singapore model
  TW : Taiwan model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

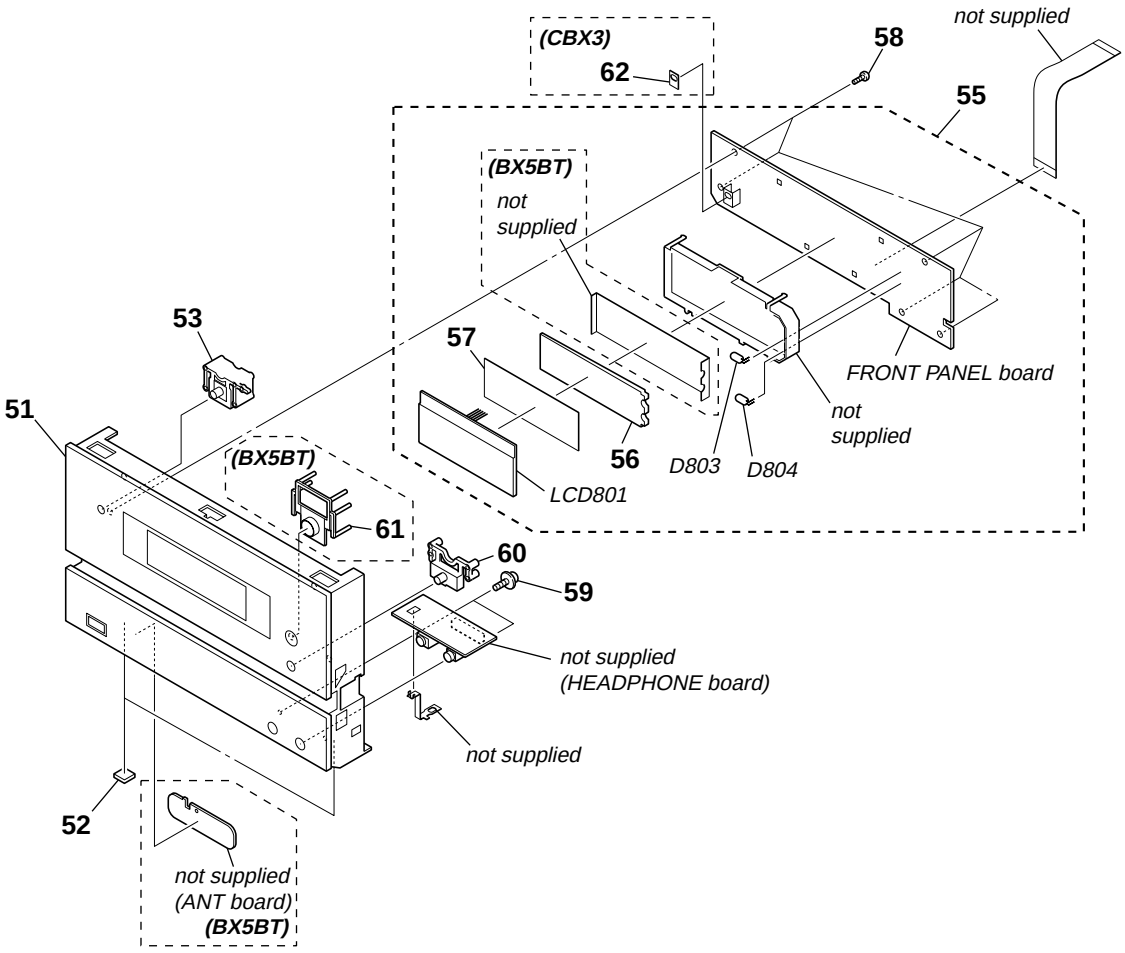
Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. PANEL SECTION



Ref. No.	Part No.	Description	Remark
1	X-2177-251-1	LID (CD) ASSY (CBX1/CBX3)	
1	X-2177-252-1	LID (CD) ASSY (BX5BT)	
2	2-895-106-01	PANEL (SIDE L) (BX5BT/CBX1)	
2	2-895-106-11	PANEL (SIDE L) (CBX3)	
3	3-087-053-01	+BVTP2.6 (3CR)	
4	2-895-104-01	PANEL (TOP) (CBX1)	
4	2-895-104-11	PANEL (TOP) (PEARL SILVER) (CBX3)	
4	2-895-104-31	PANEL (TOP) (BX5BT)	
4	2-895-104-61	PANEL (TOP) (GUNMETALLIC) (CBX3: UK)	
5	2-895-116-01	BUTTON (FUNCTION) (PEARL SILVER) (CBX3)	
5	2-895-116-11	BUTTON (FUNCTION) (BX5BT)	
5	2-895-116-21	BUTTON (FUNCTION) (GUNMETALLIC) (CBX1/CBX3: UK)	
6	2-895-115-01	BUTTON (DIRECTORY) (🗀+, ⏮ ◀◀, ENTER, ▶▶ ⏭, 🗀–) (PEARL SILVER) (CBX3)	
6	2-895-115-11	BUTTON (DIRECTORY) (🗀+, ⏮ ◀◀, ENTER, ▶▶ ⏭, 🗀–) (BX5BT)	
6	2-895-115-21	BUTTON (DIRECTORY) (🗀+, ⏮ ◀◀, ENTER, ▶▶ ⏭, 🗀–) (GUNMETALLIC) (CBX1/CBX3: UK)	
7	2-895-117-01	BUTTON (VOL) (PEARL SILVER) (CBX3)	
7	2-895-117-11	BUTTON (VOL) (BX5BT)	
7	2-895-117-21	BUTTON (VOL) (GUNMETALLIC) (CBX1/CBX3: UK)	
8	2-895-107-01	PANEL (SIDE R) (BX5BT/CBX1)	
8	2-895-107-11	PANEL (SIDE R) (CBX3)	
9	3-254-143-11	SCREW (B3), (+) BV TAPPING (BX5BT/CBX1/CBX3: UK (for GUNMETALLIC))	
9	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3 (for PEARL SILVER) (CBX3)	
10	3-254-143-11	SCREW (B3), (+) BV TAPPING	
#4	7-685-871-01	SCREW +BVTT 3X6 (S)	
#5	2-580-628-01	SCREW +BVST 3X6 (CBX3: UK (for GUNMETALLIC))	
#5	7-685-871-09	SCREW +BVTT 3X6 (S) (BX5BT/CBX1/CBX3 (for PEARL SILVER))	

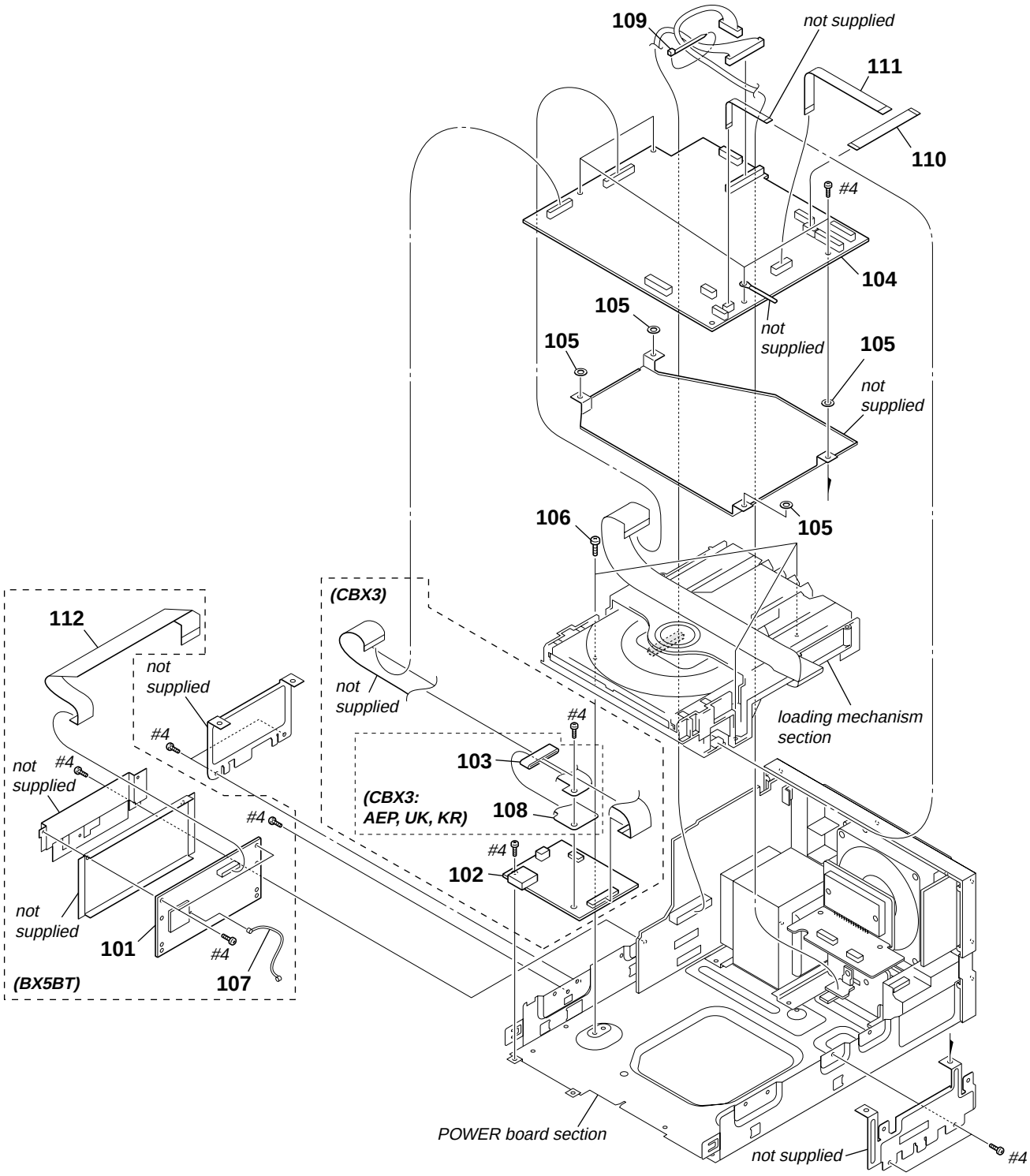
7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-2177-256-1	PANEL (FRONT) ASSY (CBX1)	
51	X-2177-269-1	PANEL (FRONT) ASSY (CBX3: CND, AUS, SP, TW, KR)	
51	X-2177-270-1	PANEL (FRONT) ASSY (PEARL SILVER) (CBX3: AEP, UK)	
51	X-2177-272-1	PANEL (FRONT) ASSY (BX5BT)	
51	X-2179-450-1	PANEL (FRONT) ASSY (GUNMETALLIC) (CBX3: UK)	
52	4-233-372-02	FOOT (FELT)	
53	X-2177-253-1	BUTTON (POWER) ASSY (GUNMETALLIC) (CBX1/CBX3: UK)	
53	X-2177-254-1	BUTTON (POWER) ASSY (PEARL SILVER) (CBX3)	
53	X-2177-255-1	BUTTON (POWER) ASSY (BX5BT)	
55	A-1236-018-A	FRONT PANEL BOARD, COMPLETE (CBX1)	
55	A-1236-335-A	FRONT PANEL BOARD, COMPLETE (CBX3: CND, AEP, UK (PEARL SILVER), AUS, TW, KR)	
55	A-1239-026-A	FRONT PANEL BOARD, COMPLETE (BX5BT)	
55	A-1267-317-A	FRONT PANEL BOARD, COMPLETE (CBX3: SP)	
55	A-1314-529-A	FRONT PANEL BOARD, COMPLETE (CBX3: UK (GUNMETALLIC))	
56	2-581-391-01	PLATE, LIGHT GUIDE	
57	2-586-988-02	SHEET (LCD), DIFFUSION	

Ref. No.	Part No.	Description	Remark
58	3-087-053-01	+BVTP2.6 (3CR)	
59	3-921-725-01	SCREW (2.6X10), +PWH	
60	2-895-114-01	BUTTON (EJECT) (PEARL SILVER) (CBX3)	
60	2-895-114-11	BUTTON (EJECT) (BX5BT)	
60	2-895-114-21	BUTTON (EJECT) (GUNMETALLIC) (CBX1/CBX3: UK)	
61	X-2177-278-1	BUTTON (BT) ASSY (BX5BT)	
62	2-681-451-01	SHEET (RM) (CBX3)	
D803	6-501-139-01	LED SELU2B10A-SLF62 (LCD BACK LIGHT) (for GUNMETALLIC) (CBX1/CBX3: UK)	
D803	6-501-827-01	LED SELU2610C-S-LF62 (LCD BACK LIGHT) (for PEARL SILVER) (CBX3)	
D803	6-501-828-01	LED SELK2E10C-D-LF62 (LCD BACK LIGHT) (BX5BT)	
D804	6-501-139-01	LED SELU2B10A-SLF62 (LCD BACK LIGHT) (for GUNMETALLIC) (CBX1/CBX3: UK)	
D804	6-501-827-01	LED SELU2610C-S-LF62 (LCD BACK LIGHT) (for PEARL SILVER) (CBX3)	
D804	6-501-828-01	LED SELK2E10C-D-LF62 (LCD BACK LIGHT) (BX5BT)	
LCD801	1-802-377-11	DISPLAY PANEL, LIQUID CRYSTAL (CBX1/CBX3)	
LCD801	1-802-377-21	DISPLAY PANEL, LIQUID CRYSTAL (BX5BT)	

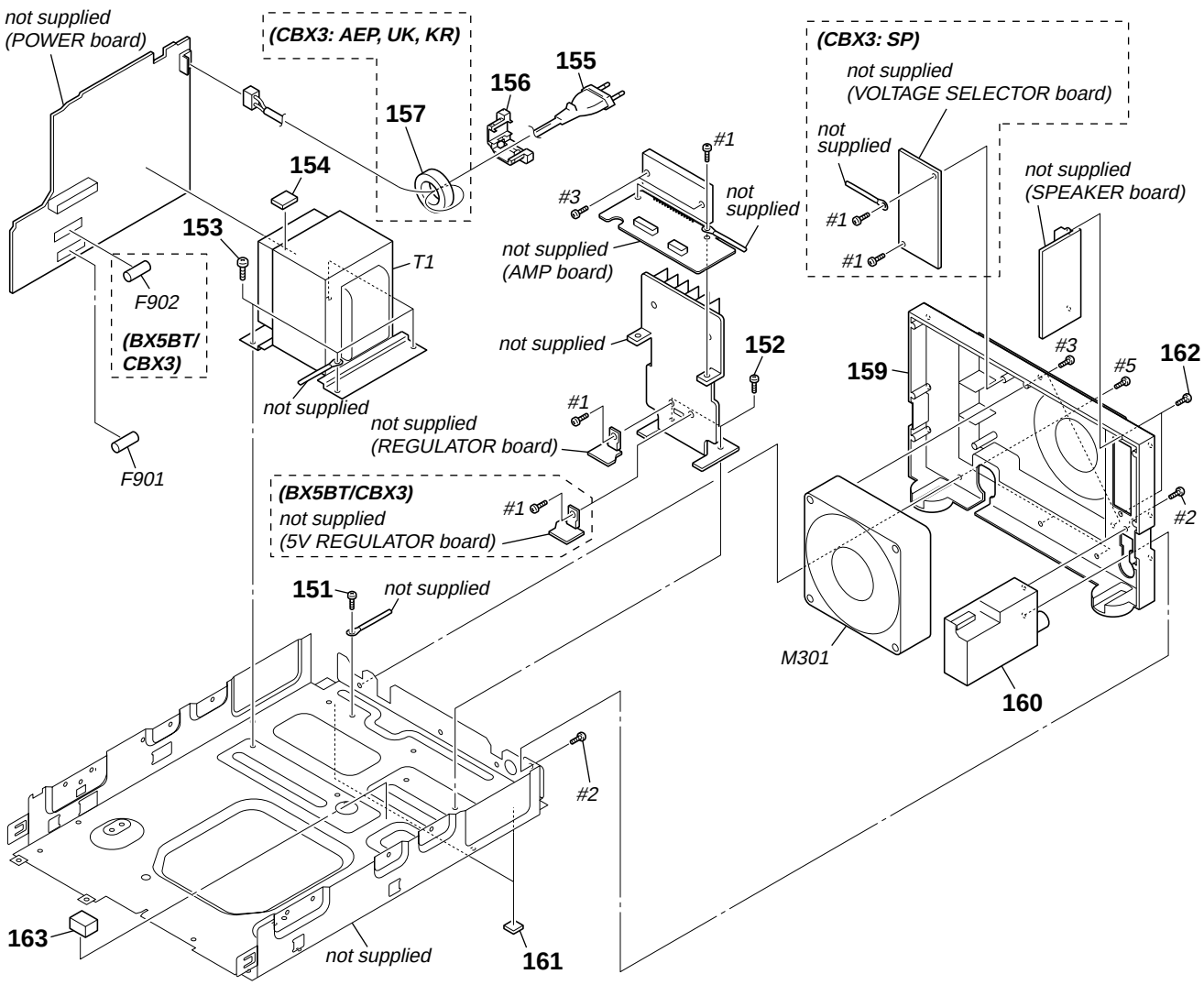
7-3. MAIN SECTION



Ref. No.	Part No.	Description	Remark
101	A-1236-563-A	BT BOARD, COMPLETE (BX5BT)	
102	A-1236-544-A	USB BOARD, COMPLETE (CBX3)	
103	1-457-413-11	CORE, FERRITE (CBX3: AEP, UK, KR)	
104	A-1236-003-A	MAIN BOARD, COMPLETE (CBX1)	
104	A-1236-325-A	MAIN BOARD, COMPLETE (CBX3: AEP, UK)	
104	A-1236-774-A	MAIN BOARD, COMPLETE (CBX3: CND)	
104	A-1236-911-A	MAIN BOARD, COMPLETE (CBX3: SP)	
104	A-1237-031-A	MAIN BOARD, COMPLETE (CBX3: KR)	
104	A-1239-022-A	MAIN BOARD, COMPLETE (BX5BT)	
104	A-1267-278-A	MAIN BOARD, COMPLETE (CBX3: AUS, TW)	
105	4-949-302-71	WASHER	

Ref. No.	Part No.	Description	Remark
106	3-077-331-01	+BV3 (3-CR)	
107	1-964-881-11	CABLE, COAXIAL (WITH U.F.L CONNECTOR)	(BX5BT)
108	3-198-559-01	SHEET (USB) (CBX3: AEP, UK, KR)	
109	3-701-748-00	CLAMP	
110	1-832-793-21	CABLE, FLEXIBLE FLAT (5 CORE)	
111	1-832-817-21	CABLE, FLEXIBLE FLAT (9 CORE) (BX5BT/CBX1/CBX3: CND, AUS, SP, TW, KR)	
111	1-832-827-21	CABLE, FLEXIBLE FLAT (11 CORE)	(CBX3: AEP, UK)
#4	7-685-871-01	SCREW +BVTT 3X6 (S)	

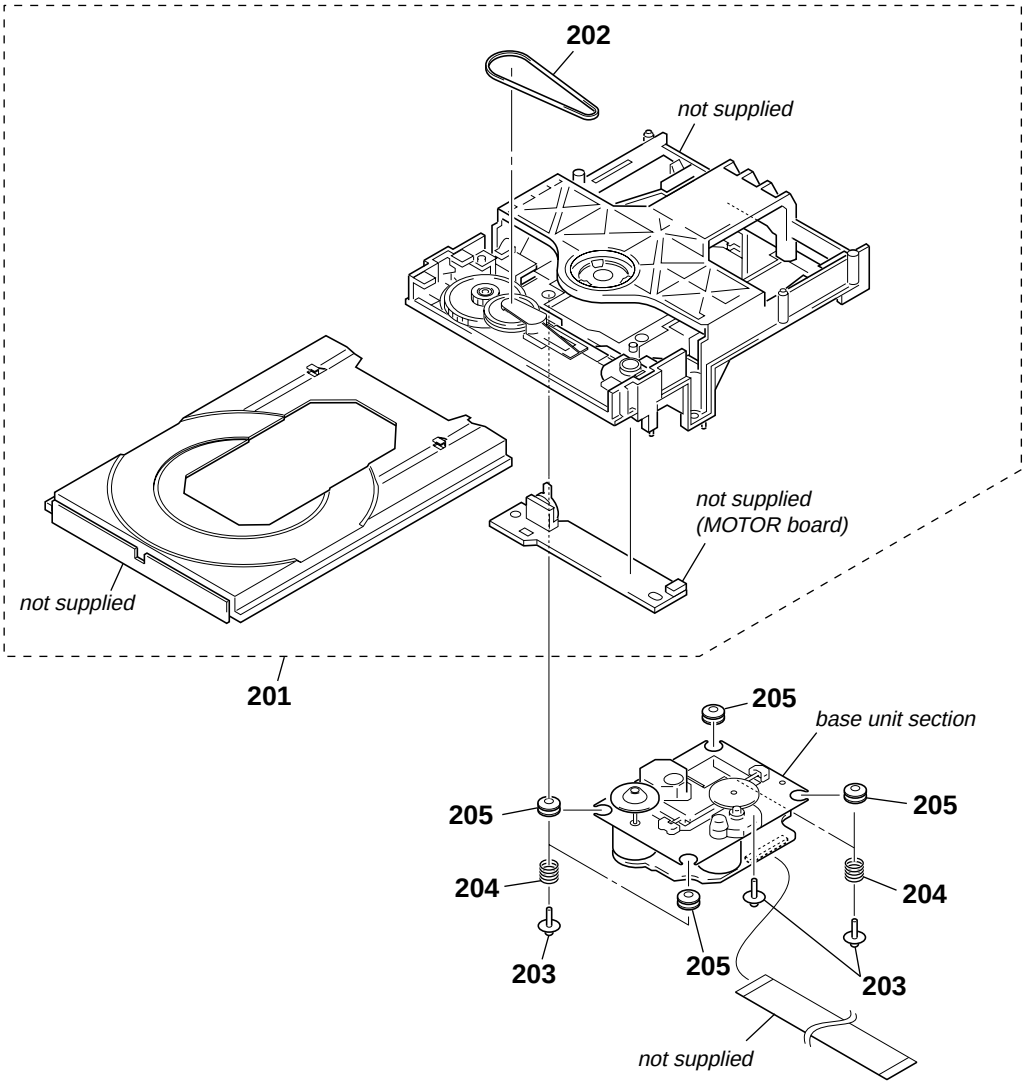
7-4. POWER BOARD SECTION



Ref. No.	Part No.	Description	Remark
151	3-077-331-21	+BV3 (3-CR)	
152	3-077-331-01	+BV3 (3-CR)	
153	4-900-386-01	SCREW	
154	2-594-960-31	SPACER (TRANSFORMER) (CBX3: AUS, SP)	
154	2-594-960-41	SPACER (TRANSFORMER) (BX5BT/CBX1/CBX3: CND, AEP, UK, TW, KR)	
⚠155	1-769-079-41	CORD, POWER (CBX3: KR)	
⚠155	1-769-744-81	CORD, POWER (CBX3: UK)	
⚠155	1-775-790-71	CORD, POWER (CBX3: AUS)	
⚠155	1-827-597-31	CORD, POWER (CBX3: TW)	
⚠155	1-830-188-11	CORD, POWER (CBX3: AEP, SP)	
⚠155	1-830-190-11	CORD, POWER (BX5BT/CBX1/CBX3: CND)	
156	3-703-244-00	BUSHING (2104), CORD	
157	1-500-868-11	CORE, FERRITE (CBX3: AEP, UK, KR)	
159	2-895-108-11	PANEL (REAR) (CBX3: CND, AEP, UK, AUS, TW, KR)	
159	2-895-108-21	PANEL (REAR) (CBX3: SP)	
159	2-895-108-61	PANEL (REAR) (BX5BT/CBX1)	
160	1-693-733-21	TUNER (FM/AM) (BX5BT/CBX1/CBX3: CND)	
160	1-639-734-21	TUNER (FM/AM) (CBX3: AUS, SP, TW)	
160	1-693-735-11	TUNER (FM/AM) (CBX3: KR)	

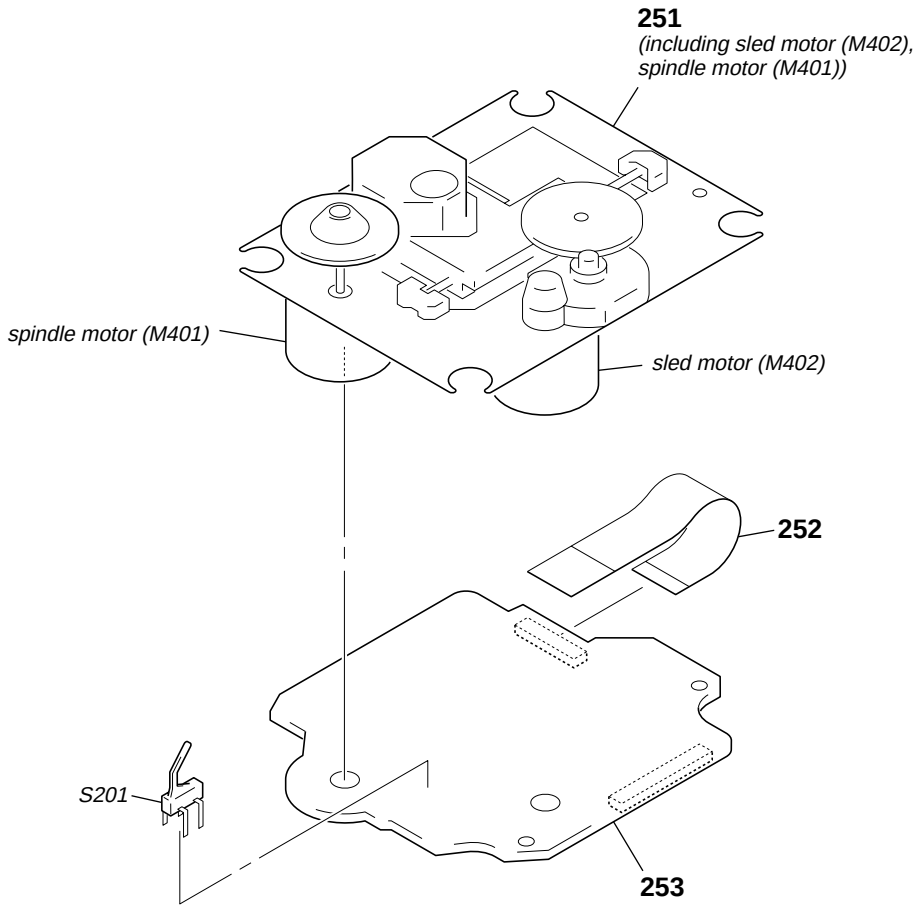
Ref. No.	Part No.	Description	Remark
160	1-693-736-11	TUNER (FM/AM) (CBX3: AEP, UK)	
161	4-233-372-02	FOOT (FELT)	
162	3-254-143-11	SCREW (B3), (+) BV TAPPING	
163	2-594-960-22	SPACER (TRANSFORMER)	
⚠F901	1-532-388-33	FUSE (T2AL/250V)	
⚠F902	1-532-388-33	FUSE (T2AL/250V) (CBX3)	
⚠F902	1-532-463-33	FUSE (T1AL/250V) (BX5BT)	
M301	1-787-400-11	D.C. FAN	
⚠T1	1-445-142-11	TRANSFORMER, POWER (CBX3: AEP, UK)	
⚠T1	1-445-182-11	TRANSFORMER, POWER (CBX1)	
⚠T1	1-445-186-11	TRANSFORMER, POWER (BX5BT)	
⚠T1	1-445-187-11	TRANSFORMER, POWER (CBX3: AUS, SP, KR)	
⚠T1	1-445-188-11	TRANSFORMER, POWER (CBX3: CND)	
⚠T1	1-445-256-11	TRANSFORMER, POWER (CBX3: TW)	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#2	7-685-863-09	SCREW +BVTT 2.6X8 (S)	
#3	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
#5	2-580-628-01	SCREW +BVST 3X6 (CBX3: UK (for GUNMETALLIC))	
#5	7-685-871-09	SCREW +BVTT 3X6 (S) (BX5BT/CBX1/CBX3 (for PEARL SILVER))	

7-5. LOADING MECHANISM SECTION



Ref. No.	Part No.	Description	Remark
201	A-1242-967-A	LOADING (BK) ASSY	
202	3-080-478-01	BELT	
203	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
204	4-227-045-41	SPRING (INSULATOR)	
205	4-229-005-41	INSULATOR	

7-6. BASE UNIT SECTION (BU-K6BD90-WOD: BX5BT/CBX1) (BU-K6BD90U-WOD: CBX3)



Ref. No.	Part No.	Description	Remark
⚠251	A-4735-357-A	BASE ASSY, OP (KSM-213D)	
252	1-832-404-21	CABLE, FLEXIBLE FLAT (16 CORE)	
253	A-1217-914-A	CD BOARD, COMPLETE (BX5BT/CBX1)	
253	A-1229-580-A	CD BOARD, COMPLETE (CBX3)	
S201	1-771-853-11	SWITCH, DETECTION (LIMIT)	

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  KR : Korean model
  SP : Singapore model
  TW : Taiwan model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		5V REGULATOR BOARD (BX5BT/CBX3)			
		**********			
		< CAPACITOR >			
C373	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C380	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
		< DIODE >			
D305	6-501-582-01	DIODE 1N4002-B5			
		< IC >			
IC306	8-759-646-52	IC KIA7805API			
		< RESISTOR >			
R424	1-216-817-11	METAL CHIP	470	5%	1/10W
R437	1-216-797-11	METAL CHIP	10	5%	1/10W
**********					
		AMP BOARD			
		*********			
		< CAPACITOR >			
C501	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (CBX3)
C502	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C503	1-126-947-11	ELECT	47uF	20%	35V
C504	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C505	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (CBX3)
C506	1-126-947-11	ELECT	47uF	20%	35V
C509	1-162-974-11	CERAMIC CHIP	0.01uF		50V (BX5BT/CBX1)
C510	1-162-974-11	CERAMIC CHIP	0.01uF		50V (BX5BT/CBX1)
C511	1-126-964-11	ELECT	10uF	20%	50V
C512	1-126-964-11	ELECT	10uF	20%	50V
C515	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C518	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C519	1-126-935-11	ELECT	470uF	20%	16V
C521	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C523	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C524	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C525	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C526	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C527	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C528	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C529	1-126-948-11	ELECT	100uF	20%	35V
		< CONNECTOR >			
CN308	1-784-766-11	CONNECTOR, FFC 5P			
		< DIODE >			
D501	8-719-080-53	DIODE RK36LF-B3			
D502	8-719-080-53	DIODE RK36LF-B3			
		< EARTH TERMINAL >			
EP501	1-537-771-21	TERMINAL BOARD, GROUND (CBX3)			
EP502	1-537-771-21	TERMINAL BOARD, GROUND (CBX3)			
		< IC >			
IC601	6-710-800-01	IC STK433-730S-E			
		< RESISTOR >			
R135	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (CBX3)
R135	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R136	1-216-837-11	METAL CHIP	22K	5%	1/10W (CBX3)
R136	1-216-841-11	METAL CHIP	47K	5%	1/10W (BX5BT/CBX1)
R235	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (CBX3)
R235	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R236	1-216-837-11	METAL CHIP	22K	5%	1/10W (CBX3)
R236	1-216-841-11	METAL CHIP	47K	5%	1/10W (BX5BT/CBX1)
R501	1-216-821-11	METAL CHIP	1K	5%	1/10W
R502	1-216-841-11	METAL CHIP	47K	5%	1/10W
R503	1-216-821-11	METAL CHIP	1K	5%	1/10W
R504	1-216-841-11	METAL CHIP	47K	5%	1/10W
R505	1-216-841-11	METAL CHIP	47K	5%	1/10W
R506	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R507	1-216-817-11	METAL CHIP	470	5%	1/10W
R508	1-216-821-11	METAL CHIP	1K	5%	1/10W
R509	1-216-841-11	METAL CHIP	47K	5%	1/10W
R510	1-216-817-11	METAL CHIP	470	5%	1/10W
R512	1-216-821-11	METAL CHIP	1K	5%	1/10W
R513	1-216-821-11	METAL CHIP	1K	5%	1/10W
R514	1-216-821-11	METAL CHIP	1K	5%	1/10W
R515	1-216-864-11	SHORT CHIP	0		
R523	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (CBX3)
R523	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R524	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (CBX3)
R524	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R542	1-260-087-11	CARBON	100	5%	1/2W
R543	1-216-841-11	METAL CHIP	47K	5%	1/10W
R544	1-216-841-11	METAL CHIP	47K	5%	1/10W
R545	1-216-833-11	METAL CHIP	10K	5%	1/10W
R546	1-216-821-11	METAL CHIP	1K	5%	1/10W
**********					
		ANT BOARD (BX5BT)			
		**********			
		< CAPACITOR >			
C914	1-162-907-11	CERAMIC CHIP	2PF	0.25PF	50V
		< CONNECTOR >			
CN904	1-818-381-11	CONNECTOR, COAXIAL			
**********					
	A-1236-563-A	BT BOARD, COMPLETE (BX5BT)			
		**********			
		< CAPACITOR >			
C901	1-126-395-11	ELECT CHIP	22uF	20%	16V
C902	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C903	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C904	1-126-398-11	ELECT CHIP	4.7uF	20%	35V
C905	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C906	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C907	1-126-204-11	ELECT CHIP	47uF	20%	16V
C908	1-126-204-11	ELECT CHIP	47uF	20%	16V
C912	1-126-204-11	ELECT CHIP	47uF	20%	16V
C921	1-126-193-11	ELECT CHIP	1uF	20%	50V
C922	1-126-193-11	ELECT CHIP	1uF	20%	50V
C923	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C924	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C925	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C926	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C927	1-126-601-11	ELECT CHIP	2.2uF	20%	50V
C928	1-126-601-11	ELECT CHIP	2.2uF	20%	50V
C929	1-126-601-11	ELECT CHIP	2.2uF	20%	50V
C930	1-126-601-11	ELECT CHIP	2.2uF	20%	50V
C931	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C932	1-162-962-11	CERAMIC CHIP	470PF	10%	50V

Ref. No.	Part No.	Description			Remark
C941	1-126-189-11	ELECT CHIP	0.22uF	20%	50V
C942	1-126-189-11	ELECT CHIP	0.22uF	20%	50V
C945	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C946	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C951	1-126-193-11	ELECT CHIP	1uF	20%	50V
C952	1-126-193-11	ELECT CHIP	1uF	20%	50V
C953	1-126-193-11	ELECT CHIP	1uF	20%	50V
C954	1-126-193-11	ELECT CHIP	1uF	20%	50V
C957	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C958	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C965	1-126-189-11	ELECT CHIP	0.22uF	20%	50V
C966	1-126-189-11	ELECT CHIP	0.22uF	20%	50V
C969	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C971	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
		< CONNECTOR >			
CN901	1-784-374-51	CONNECTOR, FFC/FPC 15P			
CN902	1-573-806-21	PIN, CONNECTOR (1.5mm) (SMD) 6P			
CN903	1-573-806-21	PIN, CONNECTOR (1.5mm) (SMD) 6P			
		< DIODE >			
D901	6-500-335-01	DIODE MC2838-T112-1			
D902	6-500-335-01	DIODE MC2838-T112-1			
		< JUMPER RESISTOR/FERRITE BEAD >			
FB901	1-216-864-11	SHORT CHIP	0		
FB902	1-216-864-11	SHORT CHIP	0		
FB903	1-216-864-11	SHORT CHIP	0		
FB904	1-216-864-11	SHORT CHIP	0		
FB905	1-216-864-11	SHORT CHIP	0		
FB906	1-216-864-11	SHORT CHIP	0		
FB907	1-400-684-21	INDUCTOR, FERRITE BEAD			
FB908	1-216-864-11	SHORT CHIP	0		
FB909	1-216-864-11	SHORT CHIP	0		
FB910	1-216-864-11	SHORT CHIP	0		
FB911	1-216-864-11	SHORT CHIP	0		
FB913	1-414-594-11	INDUCTOR, FERRITE BEAD			
FB914	1-414-594-11	INDUCTOR, FERRITE BEAD			
		< IC/BLUETOOTH MODULE >			
IC901	6-702-945-01	IC NJM14558V-TE2			
IC902	6-702-945-01	IC NJM14558V-TE2			
IC903	6-710-962-01	IC XC6213B332MR			
IC904	8-753-282-72	CXN1404-5ACL (BLUETOOTH MODULE)			
		< JUMPER RESISTOR >			
JR902	1-216-864-11	SHORT CHIP	0		
		< RESISTOR >			
R900	1-216-809-11	METAL CHIP	100	5%	1/10W
R901	1-216-809-11	METAL CHIP	100	5%	1/10W
R902	1-216-809-11	METAL CHIP	100	5%	1/10W
R903	1-216-809-11	METAL CHIP	100	5%	1/10W
R904	1-216-809-11	METAL CHIP	100	5%	1/10W
R905	1-216-809-11	METAL CHIP	100	5%	1/10W
R906	1-216-809-11	METAL CHIP	100	5%	1/10W
R907	1-216-817-11	METAL CHIP	470	5%	1/10W
R908	1-216-817-11	METAL CHIP	470	5%	1/10W

BT CD

Ref. No.	Part No.	Description			Remark
R909	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R910	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R911	1-216-864-11	SHORT CHIP	0		
R913	1-216-841-11	METAL CHIP	47K	5%	1/10W
R914	1-216-864-11	SHORT CHIP	0		
R915	1-216-841-11	METAL CHIP	47K	5%	1/10W
R916	1-216-841-11	METAL CHIP	47K	5%	1/10W
R917	1-216-841-11	METAL CHIP	47K	5%	1/10W
R918	1-216-841-11	METAL CHIP	47K	5%	1/10W
R921	1-216-809-11	METAL CHIP	100	5%	1/10W
R922	1-216-809-11	METAL CHIP	100	5%	1/10W
R923	1-216-813-11	METAL CHIP	220	5%	1/10W
R924	1-216-813-11	METAL CHIP	220	5%	1/10W
R925	1-216-813-11	METAL CHIP	220	5%	1/10W
R926	1-216-813-11	METAL CHIP	220	5%	1/10W
R927	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R928	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R929	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R930	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R931	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R932	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R933	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R934	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R935	1-216-809-11	METAL CHIP	100	5%	1/10W
R936	1-216-809-11	METAL CHIP	100	5%	1/10W
R937	1-216-809-11	METAL CHIP	100	5%	1/10W
R938	1-216-809-11	METAL CHIP	100	5%	1/10W
R939	1-216-809-11	METAL CHIP	100	5%	1/10W
R940	1-216-809-11	METAL CHIP	100	5%	1/10W
R941	1-216-809-11	METAL CHIP	100	5%	1/10W
R942	1-216-809-11	METAL CHIP	100	5%	1/10W
R943	1-216-845-11	METAL CHIP	100K	5%	1/10W
R944	1-216-845-11	METAL CHIP	100K	5%	1/10W
R945	1-216-845-11	METAL CHIP	100K	5%	1/10W
R946	1-216-845-11	METAL CHIP	100K	5%	1/10W
R947	1-216-841-11	METAL CHIP	47K	5%	1/10W
R948	1-216-841-11	METAL CHIP	47K	5%	1/10W
R949	1-216-821-11	METAL CHIP	1K	5%	1/10W
R950	1-216-821-11	METAL CHIP	1K	5%	1/10W
R951	1-216-821-11	METAL CHIP	1K	5%	1/10W
R952	1-216-821-11	METAL CHIP	1K	5%	1/10W
R953	1-216-841-11	METAL CHIP	47K	5%	1/10W
R954	1-216-841-11	METAL CHIP	47K	5%	1/10W
R955	1-216-845-11	METAL CHIP	100K	5%	1/10W
R956	1-216-845-11	METAL CHIP	100K	5%	1/10W
R957	1-216-857-11	METAL CHIP	1M	5%	1/10W
R958	1-216-857-11	METAL CHIP	1M	5%	1/10W
R959	1-216-809-11	METAL CHIP	100	5%	1/10W
R960	1-216-809-11	METAL CHIP	100	5%	1/10W
R961	1-216-809-11	METAL CHIP	100	5%	1/10W
R962	1-216-809-11	METAL CHIP	100	5%	1/10W
R963	1-216-845-11	METAL CHIP	100K	5%	1/10W
R964	1-216-845-11	METAL CHIP	100K	5%	1/10W
R965	1-216-809-11	METAL CHIP	100	5%	1/10W
R966	1-216-809-11	METAL CHIP	100	5%	1/10W
R967	1-216-845-11	METAL CHIP	100K	5%	1/10W
R968	1-216-845-11	METAL CHIP	100K	5%	1/10W
R969	1-216-817-11	METAL CHIP	470	5%	1/10W
R970	1-216-817-11	METAL CHIP	470	5%	1/10W
R971	1-216-817-11	METAL CHIP	470	5%	1/10W
R972	1-216-817-11	METAL CHIP	470	5%	1/10W
R973	1-216-817-11	METAL CHIP	470	5%	1/10W
R974	1-216-817-11	METAL CHIP	470	5%	1/10W
**********					
	A-1217-914-A	CD BOARD, COMPLETE (BX5BT/CBX1)			
	A-1229-580-A	CD BOARD, COMPLETE (CBX3)			
		**********			
		< CAPACITOR >			
C100	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C101	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C102	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C103	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C104	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C105	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C106	1-128-995-21	ELECT CHIP	100uF	20%	10V
C107	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C108	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C109	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C110	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C112	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C113	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C115	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C116	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C117	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C118	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C119	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C120	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C122	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C123	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C124	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C125	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C127	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C128	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C130	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C132	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C133	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C136	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C137	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C138	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C139	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C140	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C141	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C142	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C143	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C144	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C145	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C146	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C147	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C148	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C149	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C150	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C151	1-164-315-11	CERAMIC CHIP	470PF	5%	50V

Ref. No.	Part No.	Description			Remark
C152	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C153	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C201	1-128-995-21	ELECT CHIP	100uF	20%	10V
C202	1-128-995-21	ELECT CHIP	100uF	20%	10V
C204	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C205	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C206	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C207	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C301	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C302	1-137-710-91	CERAMIC CHIP	10uF	20%	6.3V
C303	1-137-710-91	CERAMIC CHIP	10uF	20%	6.3V
C306	1-128-995-21	ELECT CHIP	100uF	20%	10V
C307	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C309	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C401	1-128-394-11	ELECT CHIP	220uF	20%	10V
C403	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C404	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C405	1-164-360-11	CERAMIC CHIP	0.1uF		16V
		< CONNECTOR >			
CN201	1-784-833-51	CONNECTOR, FFC (LIF (NON-ZIF)) 21P (BX5BT/CBX1)			
CN203	1-784-875-51	CONNECTOR, FFC (LIF (NON-ZIF)) 25P (CBX3)			
CN301	1-770-425-51	CONNECTOR, FFC/FPC 16P			
		< IC >			
IC101	6-709-624-01	IC TC94A70FG-006 (BX5BT/CBX1)			
IC101	6-710-472-01	IC TC94A70FG-007 (S, D) (CBX3)			
IC201	6-710-808-01	IC TK63115SCL-G@GT (BX5BT/CBX1)			
IC201	6-710-936-01	IC XC6215B152MR (CBX3)			
IC401	6-710-637-01	IC BA5826SFP-E2			
		< TRANSISTOR >			
Q301	6-551-120-01	TRANSISTOR	2SA2119K		
		< RESISTOR >			
R101	1-216-813-11	METAL CHIP	220	5%	1/10W
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-295-00	SHORT CHIP	0		
R105	1-216-857-11	METAL CHIP	1M	5%	1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R108	1-216-864-11	SHORT CHIP	0		
R110	1-216-833-11	METAL CHIP	10K	5%	1/10W
R111	1-216-809-11	METAL CHIP	100	5%	1/10W
R112	1-216-809-11	METAL CHIP	100	5%	1/10W
R113	1-216-833-11	METAL CHIP	10K	5%	1/10W
R114	1-216-833-11	METAL CHIP	10K	5%	1/10W
R118	1-216-845-11	METAL CHIP	100K	5%	1/10W
R120	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
R122	1-216-864-11	SHORT CHIP	0 (CBX3)		
R123	1-216-864-11	SHORT CHIP	0 (CBX3)		
R124	1-216-864-11	SHORT CHIP	0 (CBX3)		
R125	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
R126	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
R127	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
R128	1-216-853-11	METAL CHIP	470K	5%	1/10W
R129	1-216-821-11	METAL CHIP	1K	5%	1/10W
R130	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R134	1-216-857-11	METAL CHIP	1M	5%	1/10W
R135	1-216-853-11	METAL CHIP	470K	5%	1/10W
R136	1-216-837-11	METAL CHIP	22K	5%	1/10W
R139	1-216-841-11	METAL CHIP	47K	5%	1/10W
R140	1-216-864-11	SHORT CHIP	0		
R142	1-216-837-11	METAL CHIP	22K	5%	1/10W
R143	1-216-841-11	METAL CHIP	47K	5%	1/10W
R144	1-216-837-11	METAL CHIP	22K	5%	1/10W
R145	1-216-864-11	SHORT CHIP	0		
R146	1-216-864-11	SHORT CHIP	0		
R147	1-216-864-11	SHORT CHIP	0		
R148	1-216-864-11	SHORT CHIP	0		
R149	1-216-864-11	SHORT CHIP	0		
R150	1-216-864-11	SHORT CHIP	0		
R151	1-216-864-11	SHORT CHIP	0		
R153	1-216-857-11	METAL CHIP	1M	5%	1/10W
R154	1-216-857-11	METAL CHIP	1M	5%	1/10W
R155	1-216-805-11	METAL CHIP	47	5%	1/10W
R156	1-216-809-11	METAL CHIP	100	5%	1/10W
R157	1-216-809-11	METAL CHIP	100	5%	1/10W
R201	1-216-295-00	SHORT CHIP	0		
R202	1-216-295-00	SHORT CHIP	0		
R203	1-216-809-11	METAL CHIP	100	5%	1/10W
R204	1-216-809-11	METAL CHIP	100	5%	1/10W
R205	1-216-809-11	METAL CHIP	100	5%	1/10W
R206	1-216-809-11	METAL CHIP	100	5%	1/10W
R207	1-216-809-11	METAL CHIP	100	5%	1/10W
R208	1-216-809-11	METAL CHIP	100	5%	1/10W
R209	1-216-809-11	METAL CHIP	100	5%	1/10W
R210	1-216-809-11	METAL CHIP	100	5%	1/10W
R211	1-216-809-11	METAL CHIP	100	5%	1/10W
R212	1-216-809-11	METAL CHIP	100	5%	1/10W
R213	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R214	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R215	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R216	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R218	1-216-845-11	METAL CHIP	100K	5%	1/10W
R219	1-216-845-11	METAL CHIP	100K	5%	1/10W
R220	1-216-845-11	METAL CHIP	100K	5%	1/10W
R221	1-216-845-11	METAL CHIP	100K	5%	1/10W
R222	1-216-845-11	METAL CHIP	100K	5%	1/10W
R223	1-216-845-11	METAL CHIP	100K	5%	1/10W
R301	1-216-845-11	METAL CHIP	100K	5%	1/10W
R302	1-216-864-11	SHORT CHIP	0		
R303	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R304	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R402	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R405	1-216-833-11	METAL CHIP	10K	5%	1/10W
R408	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R414	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R415	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X102	1-795-101-21	VIBRATOR, CERAMIC (16.9344MHz)			
**********					
	A-1236-018-A	FRONT PANEL BOARD, COMPLETE (CBX1)			
	A-1236-335-A	FRONT PANEL BOARD, COMPLETE (CBX3: CND, AEP, UK (PEARL SILVER), AUS, TW, KR)			
	A-1239-026-A	FRONT PANEL BOARD, COMPLETE (BX5BT)			
	A-1267-317-A	FRONT PANEL BOARD, COMPLETE (CBX3: SP)			
	A-1314-529-A	FRONT PANEL BOARD, COMPLETE (CBX3: UK (GUNMETALLIC))			
		**********			
	2-581-391-01	PLATE, LIGHT GUIDE			
	2-586-988-02	SHEET (LCD), DIFFUSION			
		< CAPACITOR >			
C810	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C819	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C835	1-165-908-11	CERAMIC CHIP	1uF	10% 10V	
C836	1-162-962-11	CERAMIC CHIP	470PF	10% 50V	
		< DIODE >			
D802	6-501-539-01	LED SELK5E20C-DTP15 (BLUETOOTH)			(BX5BT)
D802	8-719-061-96	LED SLR-325DCT31 (USB MEMORY) (CBX3)			
D803	6-501-139-01	LED SELU2B10A-SLF62 (LCD BACK LIGHT) (CBX1/CBX3: UK (GUNMETALLIC))			
D803	6-501-827-01	LED SELU2610C-S-LF62 (LCD BACK LIGHT) (CBX3: CND, AEP, UK (PEARL SILVER), AUS, SP, TW, KR)			
D803	6-501-828-01	LED SELK2E10C-D-LF62 (LCD BACK LIGHT)			(BX5BT)
D804	6-501-139-01	LED SELU2B10A-SLF62 (LCD BACK LIGHT) (CBX1/CBX3: UK (GUNMETALLIC))			
D804	6-501-827-01	LED SELU2610C-S-LF62 (LCD BACK LIGHT) (CBX3: CND, AEP, UK (PEARL SILVER), AUS, SP, TW, KR)			
D804	6-501-828-01	LED SELK2E10C-D-LF62 (LCD BACK LIGHT)			(BX5BT)
D805	6-501-483-01	LED SLR-325VCT31P (STANDBY)			
D806	6-501-193-01	DIODE 1SS355WTE-17			
		< IC >			
IC804	6-600-349-31	IC NJL24H400A			
		< LIQUID CRYSTAL DISPLAY >			
LCD801	1-802-377-11	DISPLAY PANEL, LIQUID CRYSTAL			(CBX1/CBX3)
LCD801	1-802-377-21	DISPLAY PANEL, LIQUID CRYSTAL (BX5BT)			
		< TRANSISTOR >			
Q805	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q806	8-729-027-43	TRANSISTOR	DTC114EKA-T146		(BX5BT/CBX3)
Q808	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q810	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q811	8-729-027-43	TRANSISTOR	DTC114EKA-T146		

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R815	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R816	1-216-817-11	METAL CHIP	470	5% 1/10W	
R817	1-216-821-11	METAL CHIP	1K	5% 1/10W	(BX5BT/CBX3)
R818	1-216-829-11	METAL CHIP	4.7K	5% 1/10W	
R819	1-216-809-11	METAL CHIP	100	5% 1/10W	
R820	1-216-817-11	METAL CHIP	470	5% 1/10W	
R821	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R851	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R852	1-216-825-11	METAL CHIP	2.2K	5% 1/10W	
R873	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R874	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R875	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R876	1-216-821-11	METAL CHIP	1K	5% 1/10W	(BX5BT)
R877	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R878	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R879	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R880	1-216-821-11	METAL CHIP	1K	5% 1/10W	(BX5BT)
R881	1-216-809-11	METAL CHIP	100	5% 1/10W	
R882	1-216-809-11	METAL CHIP	100	5% 1/10W	
R890	1-216-864-11	SHORT CHIP	0		
R892	1-216-821-11	METAL CHIP	1K	5% 1/10W	(BX5BT/CBX3)
R893	1-216-837-11	METAL CHIP	22K	5% 1/10W	(CBX1/CBX3)
R893	1-216-864-11	SHORT CHIP	0 (BX5BT)		
		< SWITCH >			
S801	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S802	1-762-875-21	SWITCH, KEYBOARD (BLUETOOTH OPR)			(BX5BT)
S803	1-762-875-21	SWITCH, KEYBOARD (⏏)			
**********					
		HEADPHONE BOARD			
		**********			
		< CAPACITOR >			
C131	1-162-962-11	CERAMIC CHIP	470PF	10% 50V	
C231	1-162-962-11	CERAMIC CHIP	470PF	10% 50V	
C329	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C508	1-164-156-11	CERAMIC CHIP	0.1uF	25V	
C531	1-162-974-11	CERAMIC CHIP	0.01uF	50V	
C581	1-162-974-11	CERAMIC CHIP	0.01uF	50V	
		< JACK >			
J301	1-566-822-51	JACK (AUDIO IN)			
J500	1-815-629-21	JACK (PHONES)			
		< RESISTOR >			
R132	1-216-841-11	METAL CHIP	47K	5% 1/10W	
R133	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R232	1-216-841-11	METAL CHIP	47K	5% 1/10W	
R233	1-216-821-11	METAL CHIP	1K	5% 1/10W	
R531	1-216-817-11	METAL CHIP	470	5% 1/10W	

Ref. No.	Part No.	Description			Remark
R532	1-216-817-11	METAL CHIP	470	5%	1/10W
R533	1-216-817-11	METAL CHIP	470	5%	1/10W
R534	1-216-813-11	METAL CHIP	220	5%	1/10W
					(BX5BT/CBX1)
R534	1-216-817-11	METAL CHIP	470	5%	1/10W
					(CBX3)
R535	1-216-813-11	METAL CHIP	220	5%	1/10W
					(BX5BT/CBX1)
R535	1-216-817-11	METAL CHIP	470	5%	1/10W
					(CBX3)
R536	1-216-813-11	METAL CHIP	220	5%	1/10W
					(BX5BT/CBX1)
R536	1-216-817-11	METAL CHIP	470	5%	1/10W
					(CBX3)
R537	1-216-833-11	METAL CHIP	10K	5%	1/10W
R538	1-216-833-11	METAL CHIP	10K	5%	1/10W
R539	1-216-833-11	METAL CHIP	10K	5%	1/10W
R540	1-216-833-11	METAL CHIP	10K	5%	1/10W
R581	1-216-817-11	METAL CHIP	470	5%	1/10W
R582	1-216-817-11	METAL CHIP	470	5%	1/10W
R583	1-216-817-11	METAL CHIP	470	5%	1/10W
R584	1-216-813-11	METAL CHIP	220	5%	1/10W
					(BX5BT/CBX1)
R584	1-216-817-11	METAL CHIP	470	5%	1/10W
					(CBX3)
R585	1-216-813-11	METAL CHIP	220	5%	1/10W
					(BX5BT/CBX1)
R585	1-216-817-11	METAL CHIP	470	5%	1/10W
					(CBX3)
R586	1-216-813-11	METAL CHIP	220	5%	1/10W
					(BX5BT/CBX1)
R586	1-216-817-11	METAL CHIP	470	5%	1/10W
					(CBX3)
R587	1-216-833-11	METAL CHIP	10K	5%	1/10W
R588	1-216-833-11	METAL CHIP	10K	5%	1/10W
R589	1-216-833-11	METAL CHIP	10K	5%	1/10W
R590	1-216-833-11	METAL CHIP	10K	5%	1/10W
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	A-1236-003-A	MAIN BOARD, COMPLETE (CBX1)			
	A-1236-325-A	MAIN BOARD, COMPLETE (CBX3)			
	A-1239-022-A	MAIN BOARD, COMPLETE (BX5BT)			
		**********			
		< CAPACITOR >			
C106	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(CBX3)
C107	1-126-960-11	ELECT	1uF	20%	50V
C108	1-126-960-11	ELECT	1uF	20%	50V
C110	1-126-963-11	ELECT	4.7uF	20%	50V
					(BX5BT)
C111	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(CBX3)
C112	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(CBX3)
C113	1-126-960-11	ELECT	1uF	20%	50V
C115	1-126-960-11	ELECT	1uF	20%	50V
					(BX5BT)
C116	1-126-963-11	ELECT	4.7uF	20%	50V
C117	1-126-960-11	ELECT	1uF	20%	50V
					(BX5BT)
C118	1-126-963-11	ELECT	4.7uF	20%	50V

Ref. No.	Part No.	Description			Remark
					(BX5BT)
C124	1-126-961-11	ELECT	2.2uF	20%	50V
C142	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C143	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C206	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(CBX3)
C207	1-126-960-11	ELECT	1uF	20%	50V
C208	1-126-960-11	ELECT	1uF	20%	50V
C210	1-126-963-11	ELECT	4.7uF	20%	50V
					(BX5BT)
C211	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(CBX3)
C212	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
					(CBX3)
C213	1-126-960-11	ELECT	1uF	20%	50V
C215	1-126-960-11	ELECT	1uF	20%	50V
					(BX5BT)
C216	1-126-963-11	ELECT	4.7uF	20%	50V
C217	1-126-960-11	ELECT	1uF	20%	50V
					(BX5BT)
C218	1-126-963-11	ELECT	4.7uF	20%	50V
					(BX5BT)
C224	1-126-961-11	ELECT	2.2uF	20%	50V
C242	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C243	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C301	1-124-259-11	ELECT	4.7uF	20%	50V
C302	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C303	1-126-933-11	ELECT	100uF	20%	16V
C305	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C308	1-164-156-11	CERAMIC CHIP	0.1uF		25V
					(BX5BT)
C309	1-126-933-11	ELECT	100uF	20%	16V
					(BX5BT)
C310	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C311	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C316	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C319	1-126-934-11	ELECT	220uF	20%	16V
C320	1-216-845-11	METAL CHIP	100K	5%	1/10W
					(CBX3)
C322	1-126-934-11	ELECT	220uF	20%	16V
C324	1-104-665-11	ELECT	100uF	20%	25V
C330	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C331	1-126-961-11	ELECT	2.2uF	20%	50V
					(BX5BT)
C333	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C336	1-126-965-11	ELECT	22uF	20%	50V
C338	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C339	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C340	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C341	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C342	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C344	1-126-916-11	ELECT	1000uF	20%	6.3V
C346	1-164-156-11	CERAMIC CHIP	0.1uF		25V
					(CBX3)
C347	1-164-156-11	CERAMIC CHIP	0.1uF		25V
					(CBX3)
C348	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C349	1-126-965-11	ELECT	22uF	20%	50V
C350	1-126-964-11	ELECT	10uF	20%	50V
C351	1-126-933-11	ELECT	100uF	20%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C352	1-126-953-11	ELECT	2200uF	20%	35V
C353	1-126-953-11	ELECT	2200uF	20%	35V
C354	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C355	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C356	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (CBX3)
C361	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C362	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C363	1-126-943-11	ELECT	2200uF	20%	25V
C364	1-124-261-00	ELECT	10uF	20%	50V
C366	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C367	1-126-964-11	ELECT	10uF	20%	50V
C368	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C369	1-126-926-11	ELECT	1000uF	20%	10V
C371	1-130-493-00	MYLAR	0.068uF	5%	50V
C372	1-126-768-11	ELECT	2200uF	20%	16V (BX5BT/CBX3)
C375	1-130-493-00	MYLAR	0.068uF	5%	50V
C377	1-130-493-00	MYLAR	0.068uF	5%	50V
C379	1-130-493-00	MYLAR	0.068uF	5%	50V
C383	1-126-934-11	ELECT	220uF	20%	16V (BX5BT)
C384	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V (BX5BT)
C385	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (BX5BT)
C386	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C391	1-126-935-11	ELECT	470uF	20%	16V
C392	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C393	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C394	1-126-961-11	ELECT	2.2uF	20%	50V
		< CONNECTOR >			
CN301	1-779-277-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P			
CN303	1-819-138-11	PIN, CONNECTOR 10P (CBX1)			
CN303	1-819-140-11	PIN, CONNECTOR 12P (BX5BT/CBX3)			
CN304	1-779-287-11	CONNECTOR, FFC (LIF (NON-ZIF)) 19P (CBX3)			
CN305	1-779-289-11	CONNECTOR, FFC (LIF (NON-ZIF)) 21P (BX5BT/CBX1)			
CN305	1-779-293-11	CONNECTOR, FFC (LIF (NON-ZIF)) 25P (CBX3)			
CN306	1-784-774-11	CONNECTOR, FFC 13P			
CN309	1-784-766-11	CONNECTOR, FFC 5P			
CN310	1-568-828-11	CONNECTOR, FFC 9P (BX5BT/CBX1)			
CN310	1-568-830-11	CONNECTOR, FFC 11P (CBX3)			
CN311	1-779-273-11	CONNECTOR, FFC (LIF (NON-ZIF)) 5P			
CN312	1-819-131-11	PIN, CONNECTOR 3P (CBX1)			
CN312	1-819-134-11	PIN, CONNECTOR 6P (BX5BT/CBX3)			
CN316	1-819-136-11	PIN, CONNECTOR 8P			
CN318	1-819-135-11	PIN, CONNECTOR 7P			
CN321	1-819-133-11	PIN, CONNECTOR			
CN322	1-815-445-11	PIN, CONNECTOR (PWB) 4P			
CN323	1-779-283-11	CONNECTOR, FFC (LIF (NON-ZIF)) 15P (BX5BT)			
		< DIODE >			
D302	6-501-163-01	DIODE UDZW-TE17-3.6B			
D303	6-500-334-01	DIODE MC2836-T112-1			
D304	6-501-164-01	DIODE UDZW-TE17-3.9B			
D306	6-501-193-01	DIODE 1SS355WTE-17 (CBX3)			

Ref. No.	Part No.	Description	Remark
D307	6-501-579-01	DIODE MC2837	
D308	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)	
D309	6-501-193-01	DIODE 1SS355WTE-17	
D310	6-501-193-01	DIODE 1SS355WTE-17	
D311	6-501-193-01	DIODE 1SS355WTE-17	
D312	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)	
D314	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)	
D315	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)	
D318	6-501-582-01	DIODE 1N4002-B5	
D319	6-501-579-01	DIODE MC2837	
D320	6-500-335-01	DIODE MC2838-T112-1	
D321	6-501-582-01	DIODE 1N4002-B5	
D322	6-500-334-01	DIODE MC2836-T112-1	
D323	6-501-193-01	DIODE 1SS355WTE-17	
D324	6-500-334-01	DIODE MC2836-T112-1	
D329	6-501-193-01	DIODE 1SS355WTE-17	
D330	6-501-193-01	DIODE 1SS355WTE-17	
D331	6-501-582-01	DIODE 1N4002-B5	
D332	6-500-334-01	DIODE MC2836-T112-1	
D335	6-501-579-01	DIODE MC2837 (CBX3)	
D336	6-501-579-01	DIODE MC2837 (CBX3)	
		< EARTH TERMINAL >	
EP301	1-537-771-21	TERMINAL BOARD, GROUND	
EP302	1-537-771-21	TERMINAL BOARD, GROUND (CBX3)	
		< IC >	
IC301	6-807-532-01	IC M3062LFGPFP-704 (BX5BT)	
IC301	6-807-533-01	IC M3062LFGPFP-700 (CBX1)	
IC301	6-807-534-01	IC M3062LFGPFP-701 (CBX3)	
IC304	6-710-289-01	IC R2S15904SP	
IC308	6-707-282-01	IC MM1615ANLE (BX5BT)	
IC309	8-759-430-37	IC MC14052BDTR2 (BX5BT)	
IC310	6-701-680-01	IC PST3629NR	
IC311	8-759-598-69	IC BA6956AN	
IC321	8-759-523-03	IC TC74HC4066AFT (EL) (CBX3)	
IC322	8-759-523-03	IC TC74HC4066AFT (EL) (CBX3)	
IC323	6-707-870-01	IC TC74VHC157FT (EKJ) (CBX3)	
		< JUMPER RESISTOR >	
JR101	1-216-864-11	SHORT CHIP 0 (CBX1/CBX3)	
JR104	1-216-864-11	SHORT CHIP 0 (BX5BT)	
JR107	1-216-296-11	SHORT CHIP 0	
JR201	1-216-864-11	SHORT CHIP 0 (CBX1/CBX3)	
JR204	1-216-864-11	SHORT CHIP 0 (BX5BT)	
JR207	1-216-864-11	SHORT CHIP 0	
JR211	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR212	1-216-864-11	SHORT CHIP 0	
JR213	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR214	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR215	1-216-864-11	SHORT CHIP 0 (BX5BT)	
JR219	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR221	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR222	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR223	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR227	1-216-864-11	SHORT CHIP 0 (BX5BT)	
JR301	1-216-296-11	SHORT CHIP 0	

Ref. No.	Part No.	Description		Remark
JR302	1-216-864-11	SHORT CHIP	0	
JR303	1-216-864-11	SHORT CHIP	0 (CBX3)	
JR304	1-216-864-11	SHORT CHIP	0	
JR305	1-216-296-11	SHORT CHIP	0	
JR421	1-216-296-11	SHORT CHIP	0	
JR422	1-216-864-11	SHORT CHIP	0	
JR469	1-216-296-11	SHORT CHIP	0	
JR470	1-216-296-11	SHORT CHIP	0	
JR472	1-216-296-11	SHORT CHIP	0	
JR474	1-216-864-11	SHORT CHIP	0	
JR475	1-216-864-11	SHORT CHIP	0	
JR476	1-216-864-11	SHORT CHIP	0	
JR478	1-216-864-11	SHORT CHIP	0 (CBX3)	
JR479	1-216-864-11	SHORT CHIP	0 (CBX3)	
JR480	1-216-296-11	SHORT CHIP	0 (CBX3)	
JR481	1-216-296-11	SHORT CHIP	0 (CBX3)	
JR482	1-216-864-11	SHORT CHIP	0	
JR483	1-216-864-11	SHORT CHIP	0	
JR484	1-216-864-11	SHORT CHIP	0	
JR485	1-216-864-11	SHORT CHIP	0	
JR486	1-216-296-11	SHORT CHIP	0 (CBX3)	
JR489	1-216-296-11	SHORT CHIP	0	
JR490	1-216-864-11	SHORT CHIP	0	
JR491	1-216-864-11	SHORT CHIP	0	
JR492	1-216-296-11	SHORT CHIP	0	
JR493	1-216-296-11	SHORT CHIP	0 (CBX3)	
JR494	1-216-864-11	SHORT CHIP	0	
JR495	1-216-296-11	SHORT CHIP	0	
JR497	1-216-296-11	SHORT CHIP	0 (BX5BT)	
JR498	1-216-296-11	SHORT CHIP	0 (BX5BT)	
JR500	1-216-296-11	SHORT CHIP	0	
JR505	1-216-864-11	SHORT CHIP	0	
		< COIL >		
L302	1-410-501-11	INDUCTOR	2.2uH	
		< TRANSISTOR >		
Q103	8-729-920-31	TRANSISTOR	DTC343TK	
Q203	8-729-920-31	TRANSISTOR	DTC343TK	
Q301	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q302	8-729-027-43	TRANSISTOR	DTC114EKA-T146	
Q303	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q304	8-729-600-22	TRANSISTOR	2SA1235-F	
Q305	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q306	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q309	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q310	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (BX5BT)	
Q311	8-729-024-43	TRANSISTOR	2SA1365-T112-1EF	
Q313	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q314	8-729-027-38	TRANSISTOR	DTA144EKA-T146 (CBX3)	
Q315	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q318	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (CBX3)	
Q321	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (CBX3)	
Q323	8-729-037-13	TRANSISTOR	KTA1271Y (BX5BT)	
Q324	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (BX5BT)	
Q325	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (BX5BT)	
Q333	8-729-027-43	TRANSISTOR	DTC114EKA-T146	

Ref. No.	Part No.	Description		Remark
Q338	8-729-027-43	TRANSISTOR	DTC114EKA-T146	
Q340	8-729-027-43	TRANSISTOR	DTC114EKA-T146	
Q341	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q342	8-729-600-22	TRANSISTOR	2SA1235-F	
Q343	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q344	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q390	8-729-028-54	TRANSISTOR	KTC3205	
Q391	8-729-036-86	TRANSISTOR	KTC3203Y-AT (CBX3)	
Q392	8-729-036-86	TRANSISTOR	KTC3203Y-AT	
Q393	8-729-600-22	TRANSISTOR	2SA1235-F	
		< RESISTOR >		
R101	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	(CBX3)
R101	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	(BX5BT/CBX1)
R102	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R103	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R105	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R106	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R107	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	(BX5BT)
R108	1-216-841-11	METAL CHIP	47K 5% 1/10W	(BX5BT)
R109	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R110	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R111	1-216-845-11	METAL CHIP	100K 5% 1/10W	(BX5BT)
R112	1-216-845-11	METAL CHIP	100K 5% 1/10W	(BX5BT)
R113	1-216-845-11	METAL CHIP	100K 5% 1/10W	(BX5BT)
R114	1-216-841-11	METAL CHIP	47K 5% 1/10W	(BX5BT)
R115	1-216-845-11	METAL CHIP	100K 5% 1/10W	(BX5BT)
R117	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R118	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R201	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	(CBX3)
R201	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	(BX5BT/CBX1)
R202	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R203	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R205	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R206	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R207	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	(BX5BT)
R208	1-216-841-11	METAL CHIP	47K 5% 1/10W	(BX5BT)
R209	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R210	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R211	1-216-845-11	METAL CHIP	100K 5% 1/10W	(BX5BT)
R212	1-216-845-11	METAL CHIP	100K 5% 1/10W	(BX5BT)
R213	1-216-845-11	METAL CHIP	100K 5% 1/10W	(BX5BT)
R214	1-216-841-11	METAL CHIP	47K 5% 1/10W	(BX5BT)

MAIN

Ref. No.	Part No.	Description			Remark
R215	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R217	1-216-841-11	METAL CHIP	47K	5%	1/10W
R218	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R227	1-216-837-11	METAL CHIP	22K	5%	1/10W
R300	1-216-809-11	METAL CHIP	100	5%	1/10W
R301	1-216-809-11	METAL CHIP	100	5%	1/10W
R302	1-216-809-11	METAL CHIP	100	5%	1/10W
R303	1-216-809-11	METAL CHIP	100	5%	1/10W
R304	1-216-809-11	METAL CHIP	100	5%	1/10W
R305	1-216-805-11	METAL CHIP	47	5%	1/10W
R306	1-216-837-11	METAL CHIP	22K	5%	1/10W
R307	1-216-821-11	METAL CHIP	1K	5%	1/10W
R308	1-249-401-11	CARBON	47	5%	1/4W
R309	1-216-833-11	METAL CHIP	10K	5%	1/10W
R310	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R311	1-216-849-11	METAL CHIP	220K	5%	1/10W
R312	1-249-401-11	CARBON	47	5%	1/4W
R313	1-216-864-11	SHORT CHIP	0		
R314	1-249-401-11	CARBON	47	5%	1/4W
R315	1-216-845-11	METAL CHIP	100K	5%	1/10W
R316	1-216-864-11	SHORT CHIP	0		
R317	1-216-841-11	METAL CHIP	47K	5%	1/10W
R318	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R319	1-216-809-11	METAL CHIP	100	5%	1/10W
R320	1-216-841-11	METAL CHIP	47K	5%	1/10W
R321	1-216-841-11	METAL CHIP	47K	5%	1/10W
R322	1-216-809-11	METAL CHIP	100	5%	1/10W
R325	1-216-809-11	METAL CHIP	100	5%	1/10W
R326	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT/CBX3)
R327	1-216-809-11	METAL CHIP	100	5%	1/10W
R328	1-216-809-11	METAL CHIP	100	5%	1/10W
R329	1-216-809-11	METAL CHIP	100	5%	1/10W
R330	1-216-809-11	METAL CHIP	100	5%	1/10W
R331	1-216-809-11	METAL CHIP	100	5%	1/10W
R332	1-216-809-11	METAL CHIP	100	5%	1/10W
R333	1-216-809-11	METAL CHIP	100	5%	1/10W
R334	1-216-809-11	METAL CHIP	100	5%	1/10W
R335	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R336	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R337	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R338	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R339	1-216-833-11	METAL CHIP	10K	5%	1/10W (CBX3)
R340	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R341	1-216-805-11	METAL CHIP	47	5%	1/10W
R344	1-216-809-11	METAL CHIP	100	5%	1/10W
R345	1-216-841-11	METAL CHIP	47K	5%	1/10W
R354	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R355	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R357	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R358	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R365	1-216-809-11	METAL CHIP	100	5%	1/10W
R366	1-216-809-11	METAL CHIP	100	5%	1/10W
R367	1-216-809-11	METAL CHIP	100	5%	1/10W
R368	1-216-809-11	METAL CHIP	100	5%	1/10W
R369	1-216-809-11	METAL CHIP	100	5%	1/10W
R370	1-216-809-11	METAL CHIP	100	5%	1/10W
R371	1-216-809-11	METAL CHIP	100	5%	1/10W
R372	1-216-809-11	METAL CHIP	100	5%	1/10W
R375	1-216-809-11	METAL CHIP	100	5%	1/10W
R376	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R381	1-216-821-11	METAL CHIP	1K	5%	1/10W
R382	1-216-821-11	METAL CHIP	1K	5%	1/10W
R385	1-216-864-11	SHORT CHIP	0 (CBX1/CBX3)		
R386	1-216-849-11	METAL CHIP	220K	5%	1/10W
R387	1-216-809-11	METAL CHIP	100	5%	1/10W
R388	1-216-809-11	METAL CHIP	100	5%	1/10W
R389	1-216-809-11	METAL CHIP	100	5%	1/10W
R390	1-216-809-11	METAL CHIP	100	5%	1/10W
R391	1-216-809-11	METAL CHIP	100	5%	1/10W
R392	1-216-809-11	METAL CHIP	100	5%	1/10W
R393	1-216-809-11	METAL CHIP	100	5%	1/10W
R394	1-216-813-11	METAL CHIP	220	5%	1/10W
R395	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R397	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R402	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R403	1-216-821-11	METAL CHIP	1K	5%	1/10W
R404	1-216-821-11	METAL CHIP	1K	5%	1/10W
R406	1-216-849-11	METAL CHIP	220K	5%	1/10W
R407	1-216-833-11	METAL CHIP	10K	5%	1/10W
R408	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R410	1-216-845-11	METAL CHIP	100K	5%	1/10W
R411	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R413	1-216-841-11	METAL CHIP	47K	5%	1/10W
R414	1-216-805-11	METAL CHIP	47	5%	1/10W
R416	1-216-841-11	METAL CHIP	47K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
R419	1-216-841-11	METAL CHIP	47K	5%	1/10W
R420	1-216-841-11	METAL CHIP	47K	5%	1/10W
R421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R423	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R425	1-216-845-11	METAL CHIP	100K	5%	1/10W
R426	1-216-833-11	METAL CHIP	10K	5%	1/10W
R427	1-216-837-11	METAL CHIP	22K	5%	1/10W
R429	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R430	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R431	1-216-841-11	METAL CHIP	47K	5%	1/10W
R432	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX1/CBX3)

Ref. No.	Part No.	Description			Remark
R433	1-216-833-11	METAL CHIP	10K	5%	1/10W
R434	1-216-833-11	METAL CHIP	10K	5%	1/10W
R435	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R436	1-216-837-11	METAL CHIP	22K	5%	1/10W
R438	1-216-821-11	METAL CHIP	1K	5%	1/10W
R439	1-216-841-11	METAL CHIP	47K	5%	1/10W
R440	1-216-821-11	METAL CHIP	1K	5%	1/10W
R441	1-216-833-11	METAL CHIP	10K	5%	1/10W
R442	1-216-833-11	METAL CHIP	10K	5%	1/10W
R443	1-216-845-11	METAL CHIP	100K	5%	1/10W
R444	1-216-841-11	METAL CHIP	47K	5%	1/10W
R445	1-216-833-11	METAL CHIP	10K	5%	1/10W
R446	1-216-833-11	METAL CHIP	10K	5%	1/10W
R447	1-216-821-11	METAL CHIP	1K	5%	1/10W
R448	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R449	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R450	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R451	1-216-821-11	METAL CHIP	1K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R454	1-216-841-11	METAL CHIP	47K	5%	1/10W
R455	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (BX5BT)
R456	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (BX5BT)
R457	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX1/CBX3)
R458	1-216-841-11	METAL CHIP	47K	5%	1/10W
R461	1-216-841-11	METAL CHIP	47K	5%	1/10W
R462	1-216-821-11	METAL CHIP	1K	5%	1/10W
R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R464	1-216-833-11	METAL CHIP	10K	5%	1/10W
R465	1-216-841-11	METAL CHIP	47K	5%	1/10W
R466	1-216-841-11	METAL CHIP	47K	5%	1/10W
R467	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R468	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R469	1-216-845-11	METAL CHIP	100K	5%	1/10W
R470	1-216-845-11	METAL CHIP	100K	5%	1/10W
R471	1-216-833-11	METAL CHIP	10K	5%	1/10W
R472	1-216-821-11	METAL CHIP	1K	5%	1/10W
R473	1-216-857-11	METAL CHIP	1M	5%	1/10W
R474	1-216-857-11	METAL CHIP	1M	5%	1/10W
R477	1-216-821-11	METAL CHIP	1K	5%	1/10W
R479	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R480	1-216-837-11	METAL CHIP	22K	5%	1/10W (BX5BT)
R485	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R486	1-216-845-11	METAL CHIP	100K	5%	1/10W
R487	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R488	1-216-817-11	METAL CHIP	470	5%	1/10W (BX5BT)
R490	1-216-833-11	METAL CHIP	10K	5%	1/10W
R491	1-216-833-11	METAL CHIP	10K	5%	1/10W
R492	1-216-833-11	METAL CHIP	10K	5%	1/10W
R493	1-216-833-11	METAL CHIP	10K	5%	1/10W
R494	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R495	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
R496	1-216-845-11	METAL CHIP	100K	5%	1/10W
R497	1-216-821-11	METAL CHIP	1K	5%	1/10W (BX5BT/CBX1)
R497	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX3)
R499	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
		< VIBRATOR >			
X301	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			
X302	1-760-489-11	VIBRATOR, CERAMIC (5MHz)			
**********					
		MOTOR BOARD			
		**********			
		< CONNECTOR >			
CN001	1-779-542-21	CONNECTOR, FFC(LIF(NON-ZIF))5P			
		< SWITCH >			
S001	1-786-509-11	SWITCH, ROTARY (CD TRAY OPEN/CLOSE DETECT)			
**********					
		POWER BOARD			
		**********			
		< CAPACITOR >			
C901	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C902	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C905	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C906	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C914	1-126-964-11	ELECT	10uF	20%	50V
C921	1-126-767-11	ELECT	1000uF	20%	16V
⚠C931	1-113-924-11	CERAMIC	0.0047uF	20%	250V
		< CONNECTOR >			
* CN901	1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P			
		< DIODE >			
D906	6-501-193-01	DIODE 1SS355WTE-17			
D907	6-501-582-01	DIODE 1N4002-B5			
D908	6-501-582-01	DIODE 1N4002-B5			
D909	6-501-582-01	DIODE 1N4002-B5			
D910	6-501-582-01	DIODE 1N4002-B5			
D911	6-501-582-01	DIODE 1N4002-B5			
D912	6-501-582-01	DIODE 1N4002-B5			
D913	6-501-582-01	DIODE 1N4002-B5			
D914	6-501-582-01	DIODE 1N4002-B5			
D916	6-501-569-01	DIODE 1N5401-C352			
D917	6-501-569-01	DIODE 1N5401-C352			
D918	6-501-569-01	DIODE 1N5401-C352			
D919	6-501-569-01	DIODE 1N5401-C352			
D920	6-500-335-01	DIODE MC2838-T112-1			
D922	6-501-193-01	DIODE 1SS355WTE-17			
D923	6-500-335-01	DIODE MC2838-T112-1			

Ref. No.	Part No.	Description			Remark
		< FUSE HOLDER >			
FH901	1-533-233-31	FUSE HOLDER			
FH902	1-533-233-31	FUSE HOLDER			
FH903	1-533-233-31	FUSE HOLDER (BX5BT/CBX3)			
FH904	1-533-233-31	FUSE HOLDER (BX5BT/CBX3)			
		< LINE FILTER >			
⚠LF901	1-443-993-11	TRANSFORMER, LINE FILTER (LFT)			
		< RESISTOR >			
R901	1-216-837-11	METAL CHIP	22K	5%	1/10W
R902	1-216-837-11	METAL CHIP	22K	5%	1/10W
⚠R903	1-219-512-22	METAL	2.2M	5%	1/2W (BX5BT/CBX1)
R904	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R905	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R906	1-216-833-11	METAL CHIP	10K	5%	1/10W
R908	1-216-821-11	METAL CHIP	1K	5%	1/10W
R909	1-216-821-11	METAL CHIP	1K	5%	1/10W
R910	1-216-864-11	SHORT CHIP	0		
R911	1-216-864-11	SHORT CHIP	0		
		< RELAY >			
⚠RY901	1-755-334-11	RELAY, AC POWER			
		< TRANSFORMER >			
⚠T902	1-443-846-11	TRANSFORMER, POWER (BX5BT/CBX1)			
⚠T902	1-443-912-11	TRANSFORMER, POWER (CBX3)			
**********					
		REGULATOR BOARD			
		**********			
		< CAPACITOR >			
C325	1-126-933-11	ELECT	100uF	20%	16V
C335	1-164-156-11	CERAMIC CHIP	0.1uF		25V
		< IC >			
IC305	6-700-830-01	IC KIA7809API (CBX3: AEP, UK, AUS, SP, TW, KR)			
IC305	8-759-231-56	IC TA7809S (BX5BT/CBX1/CXB3: CND)			
**********					
		SPEAKER BOARD			
		**********			
		< CAPACITOR >			
C119	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C122	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C123	1-162-974-11	CERAMIC CHIP	0.01uF		50V (CBX3)
C125	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V (CBX3)
C219	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C222	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C223	1-162-974-11	CERAMIC CHIP	0.01uF		50V (CBX3)
C225	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V (CBX3)
C304	1-126-960-11	ELECT	1uF	20%	50V
C306	1-126-964-11	ELECT	10uF	20%	50V
C307	1-126-963-11	ELECT	4.7uF	20%	50V
C387	1-126-933-11	ELECT	100uF	20%	16V
		< CONNECTOR >			
CN313	1-819-131-11	PIN, CONNECTOR 3P			
		< DIODE >			
D313	6-500-335-01	DIODE MC2838-T112-1			
		< TERMINAL BOARD >			
J302	1-780-275-11	TERMINAL BOARD, PUSH (4P) (SPEAKER)			
		< COIL >			
L101	1-422-009-13	COIL, AIR-CORE			
L201	1-422-009-13	COIL, AIR-CORE			
		< TRANSISTOR >			
Q307	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q316	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q317	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
		< RESISTOR >			
R129	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R130	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R153	1-260-304-51	CARBON	10	5%	1/2W
R229	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R230	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R253	1-260-304-51	CARBON	10	5%	1/2W
R409	1-216-841-11	METAL CHIP	47K	5%	1/10W
R415	1-216-845-11	METAL CHIP	100K	5%	1/10W
R422	1-216-817-11	METAL CHIP	470	5%	1/10W
R428	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R459	1-216-805-11	METAL CHIP	47	5%	1/10W
R460	1-216-805-11	METAL CHIP	47	5%	1/10W
R475	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R478	1-216-833-11	METAL CHIP	10K	5%	1/10W
R481	1-216-805-11	METAL CHIP	47	5%	1/10W
R482	1-216-797-11	METAL CHIP	10	5%	1/10W
R484	1-216-849-11	METAL CHIP	220K	5%	1/10W
R489	1-216-833-11	METAL CHIP	10K	5%	1/10W (CBX3)
R489	1-216-837-11	METAL CHIP	22K	5%	1/10W (BX5BT/CBX1)
R498	1-216-833-11	METAL CHIP	10K	5%	1/10W (CBX3)
R498	1-216-837-11	METAL CHIP	22K	5%	1/10W (BX5BT/CBX1)
**********					
		TOP PANEL BOARD			
		**********			
		< RESISTOR >			
R853	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R854	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R855	1-216-833-11	METAL CHIP	10K	5%	1/10W
R856	1-216-837-11	METAL CHIP	22K	5%	1/10W
R857	1-216-841-11	METAL CHIP	47K	5%	1/10W
R858	1-216-821-11	METAL CHIP	1K	5%	1/10W (CBX1)
R858	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX3)		
R859	1-216-821-11	METAL CHIP	1K	5%	1/10W (BX5BT)
R859	1-216-864-11	SHORT CHIP	0 (CBX1/CBX3)		
R860	1-216-821-11	METAL CHIP	1K	5%	1/10W (CBX3)
R860	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (BX5BT/CBX1)
R861	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R862	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (CBX3)
R862	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R863	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX3)
R863	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT/CBX1)
R864	1-216-821-11	METAL CHIP	1K	5%	1/10W
R865	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R866	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R867	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< SWITCH >			
S804	1-762-875-21	SWITCH, KEYBOARD (VOL +)			
S805	1-762-875-21	SWITCH, KEYBOARD (VOL –)			
S806	1-762-875-21	SWITCH, KEYBOARD (TUNE +, ▶▶ ▷▷⏭)			
S807	1-762-875-21	SWITCH, KEYBOARD (ENTER)			
S808	1-762-875-21	SWITCH, KEYBOARD (FOLDER +)			
S809	1-762-875-21	SWITCH, KEYBOARD (BLUETOOTH ▶II) (BX5BT)			
S809	1-762-875-21	SWITCH, KEYBOARD (AUDIO IN) (CBX1)			
S809	1-762-875-21	SWITCH, KEYBOARD (USB ▶II) (CBX3)			
S810	1-762-875-21	SWITCH, KEYBOARD (CD ▶II)			
S811	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)			
S812	1-762-875-21	SWITCH, KEYBOARD (FUNCTION) (BX5BT/CBX1)			
S812	1-762-875-21	SWITCH, KEYBOARD (AUDIO IN) (CBX3)			
S813	1-762-875-21	SWITCH, KEYBOARD (FOLDER –)			
S815	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)			
S816	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE/TUNING MODEL)			
S817	1-762-875-21	SWITCH, KEYBOARD (DSGX)			
S818	1-762-875-21	SWITCH, KEYBOARD (■/CANCEL)			
S819	1-762-875-21	SWITCH, KEYBOARD (TUNE –, ⏮◁◁ ◀◀)			
**********					
	A-1236-544-A	USB BOARD, COMPLETE (CBX3)			
		**********			
		< CAPACITOR/JUMPER RESISTOR >			
C901	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C902	1-124-779-00	ELECT CHIP	10uF	20%	16V
C903	1-124-779-00	ELECT CHIP	10uF	20%	16V
C904	1-124-779-00	ELECT CHIP	10uF	20%	16V
C905	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C906	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C907	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C908	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C909	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C910	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C912	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C913	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C914	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C915	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C916	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C917	1-100-354-21	ELECT CHIP	220uF	20%	6.3V
C918	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C920	1-164-360-11	CERAMIC CHIP	0.1uF		16V
C921	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C922	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C930	1-216-864-11	SHORT CHIP	0		
		< CONNECTOR >			
CN902	1-794-548-21	CONNECTOR, USB (A) (USB)			
CN904	1-784-859-51	CONNECTOR, FFC (LIF (NON-ZIF)) 7P			
CN905	1-784-871-51	CONNECTOR, FFC (LIF (NON-ZIF)) 19P			
CN908	1-770-469-21	PIN, CONNECTOR (PC BOARD) 2P			
		< DIODE >			
D901	6-501-579-01	DIODE MC2837			
D902	6-501-579-01	DIODE MC2837			
D905	6-501-579-01	DIODE MC2837			
		< EARTH TERMINAL >			
EP901	1-537-771-21	TERMINAL BOARD, GROUND			
		< JUMPER RESISTOR/FERRITE BEAD >			
FB901	1-216-295-00	SHORT CHIP	0		
FB902	1-414-233-22	INDUCTOR, FERRITE BEAR			
		< IC >			
IC901	6-711-265-01	IC TMP92CD28FG-2CB2			
IC915	6-710-887-01	IC R5523N001B-TR-F			
IC921	6-704-832-01	IC IS61LV6416-10TLT			
		< JUMPER RESISTOR >			
JR902	1-216-295-00	SHORT CHIP	0		
		< RESISTOR >			
R901	1-216-833-11	METAL CHIP	10K	5%	1/10W
R902	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R903	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R904	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R905	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R906	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R907	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R913	1-216-845-11	METAL CHIP	100K	5%	1/10W
R915	1-216-833-11	METAL CHIP	10K	5%	1/10W
R916	1-216-864-11	SHORT CHIP	0		
R917	1-216-864-11	SHORT CHIP	0		
R919	1-216-809-11	METAL CHIP	100	5%	1/10W
R920	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R921	1-216-845-11	METAL CHIP	100K	5%	1/10W
R922	1-216-845-11	METAL CHIP	100K	5%	1/10W
R923	1-216-802-11	METAL CHIP	27	5%	1/10W
R924	1-216-802-11	METAL CHIP	27	5%	1/10W
R925	1-216-835-11	METAL CHIP	15K	5%	1/10W
R926	1-216-835-11	METAL CHIP	15K	5%	1/10W
R928	1-216-864-11	SHORT CHIP	0		
R932	1-216-809-11	METAL CHIP	100	5%	1/10W
R933	1-216-864-11	SHORT CHIP	0		
R934	1-216-833-11	METAL CHIP	10K	5%	1/10W
R937	1-216-809-11	METAL CHIP	100	5%	1/10W
R938	1-216-809-11	METAL CHIP	100	5%	1/10W
R941	1-216-845-11	METAL CHIP	100K	5%	1/10W
R942	1-216-845-11	METAL CHIP	100K	5%	1/10W
R943	1-216-845-11	METAL CHIP	100K	5%	1/10W
R944	1-216-845-11	METAL CHIP	100K	5%	1/10W
R946	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R948	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R949	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R970	1-216-809-11	METAL CHIP	100	5%	1/10W
R971	1-216-809-11	METAL CHIP	100	5%	1/10W
R972	1-216-809-11	METAL CHIP	100	5%	1/10W
R973	1-216-809-11	METAL CHIP	100	5%	1/10W
R974	1-216-809-11	METAL CHIP	100	5%	1/10W
R975	1-216-809-11	METAL CHIP	100	5%	1/10W
R976	1-216-809-11	METAL CHIP	100	5%	1/10W
R977	1-216-809-11	METAL CHIP	100	5%	1/10W
R978	1-216-809-11	METAL CHIP	100	5%	1/10W
R979	1-216-809-11	METAL CHIP	100	5%	1/10W
R981	1-216-809-11	METAL CHIP	100	5%	1/10W
R982	1-216-809-11	METAL CHIP	100	5%	1/10W
R983	1-216-809-11	METAL CHIP	100	5%	1/10W
R984	1-216-809-11	METAL CHIP	100	5%	1/10W
		< COMPOSITION CIRCUIT BLOCK >			
RB921	1-234-944-21	RES, NETWORK	47 (1005X4)		
RB922	1-234-944-21	RES, NETWORK	47 (1005X4)		
RB923	1-234-944-21	RES, NETWORK	47 (1005X4)		
RB924	1-234-944-21	RES, NETWORK	47 (1005X4)		
		< VIBRATOR >			
X901	1-813-931-21	VIBRATOR, CRYSTAL (9MHz)			
**********					
		MISCELLANEOUS			
		**********			
103	1-457-413-11	CORE, FERRITE (CBX3: AEP, UK, KR)			
107	1-964-881-11	CABLE, COAXIAL (WITH U.F.L CONNECTOR)			(BX5BT)
110	1-832-793-21	CABLE, FLEXIBLE FLAT (5 CORE)			
111	1-832-817-21	CABLE, FLEXIBLE FLAT (9 CORE) (BX5BT/CBX1/CBX3: CND, AUS, SP, TW, KR)			
111	1-832-827-21	CABLE, FLEXIBLE FLAT (11 CORE)			(CBX3: AEP, UK)
⚠155	1-769-079-41	CORD, POWER (CBX3: KR)			
⚠155	1-769-744-81	CORD, POWER (CBX3: UK)			
⚠155	1-775-790-71	CORD, POWER (CBX3: AUS)			
⚠155	1-827-597-31	CORD, POWER (CBX3: TW)			

Ref. No.	Part No.	Description	Remark
⚠155	1-830-188-11	CORD, POWER (CBX3: AEP, SP)	
⚠155	1-830-190-11	CORD, POWER (BX5BT/CBX1/CBX3: CND)	
157	1-500-868-11	CORE, FERRITE (CBX3: AEP, UK, KR)	
160	1-693-733-21	TUNER (FM/AM) (BX5BT/CBX1/CBX3: CND)	
160	1-639-734-21	TUNER (FM/AM) (CBX3: AUS, SP, TW)	
160	1-693-735-11	TUNER (FM/AM) (CBX3: KR)	
160	1-693-736-11	TUNER (FM/AM) (CBX3: AEP, UK)	
201	A-1242-967-A	LOADING (BK) ASSY	
⚠251	A-4735-357-A	BASE ASSY, OP (KSM-213D)	
252	1-832-404-21	CABLE, FLEXIBLE FLAT (16 CORE)	
⚠F901	1-532-388-33	FUSE (T2AL/250V)	
⚠F902	1-532-388-33	FUSE (T2AL/250V) (CBX3)	
⚠F902	1-532-463-33	FUSE (T1AL/250V) (BX5BT)	
M301	1-787-400-11	D.C. FAN	
S201	1-771-853-11	SWITCH, DETECTION (LIMIT)	
⚠T1	1-445-142-11	TRANSFORMER, POWER (CBX3: AEP, UK)	
⚠T1	1-445-182-11	TRANSFORMER, POWER (CBX1)	
⚠T1	1-445-186-11	TRANSFORMER, POWER (BX5BT)	
⚠T1	1-445-187-11	TRANSFORMER, POWER (CBX3: AUS, SP, KR)	
⚠T1	1-445-188-11	TRANSFORMER, POWER (CBX3: CND)	
⚠T1	1-445-256-11	TRANSFORMER, POWER (CBX3: TW)	
**********			
		ACCESSORIES	
		**********	
⚠	1-569-008-22	ADAPTOR, CONVERSION 2P (CBX3: SP)	
⚠	1-770-019-61	ADAPTOR, CONVERSION PLUG (CBX3: UK)	

HCD-BX5BT/CBX1/CBX3

SONY

SERVICE MANUAL

Ver. 1.3 2007.06

US Model
HCD-BX5BT/CBX1
Canadian Model
AEP Model
UK Model
E Model
Australian Model
HCD-CBX3

SUPPLEMENT-1

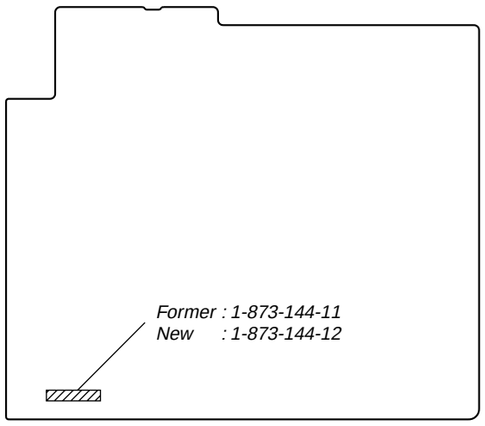
File this supplement with the service manual.

Subject: Change of MAIN board (Suffix-12)
Change of POWER board (Suffix-12/-13)

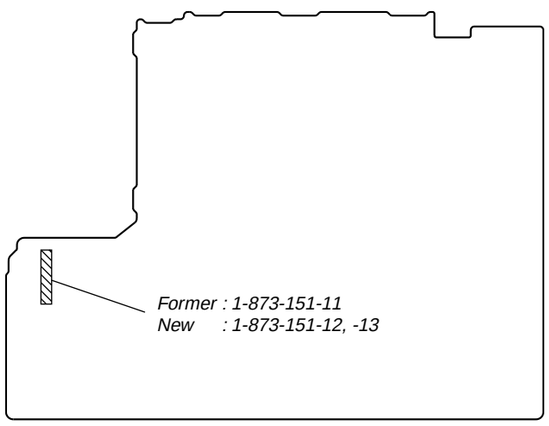
In this set, MAIN and POWER boards have been changed in the midway of production.
Printed wiring boards and schematic diagrams and electrical parts list of new type are described in this supplement-1.
Refer to original service manual for other information.

1. NEW/FORMER DISCRIMINATION

– MAIN Board (Component Side) –



– POWER Board (Component Side) –

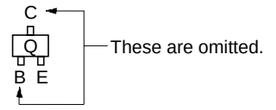


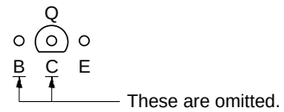
2. DIAGRAMS

- **Note for Printed Wiring Boards and Schematic Diagrams**

Note on Printed Wiring Board:
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)
- Indication of transistor



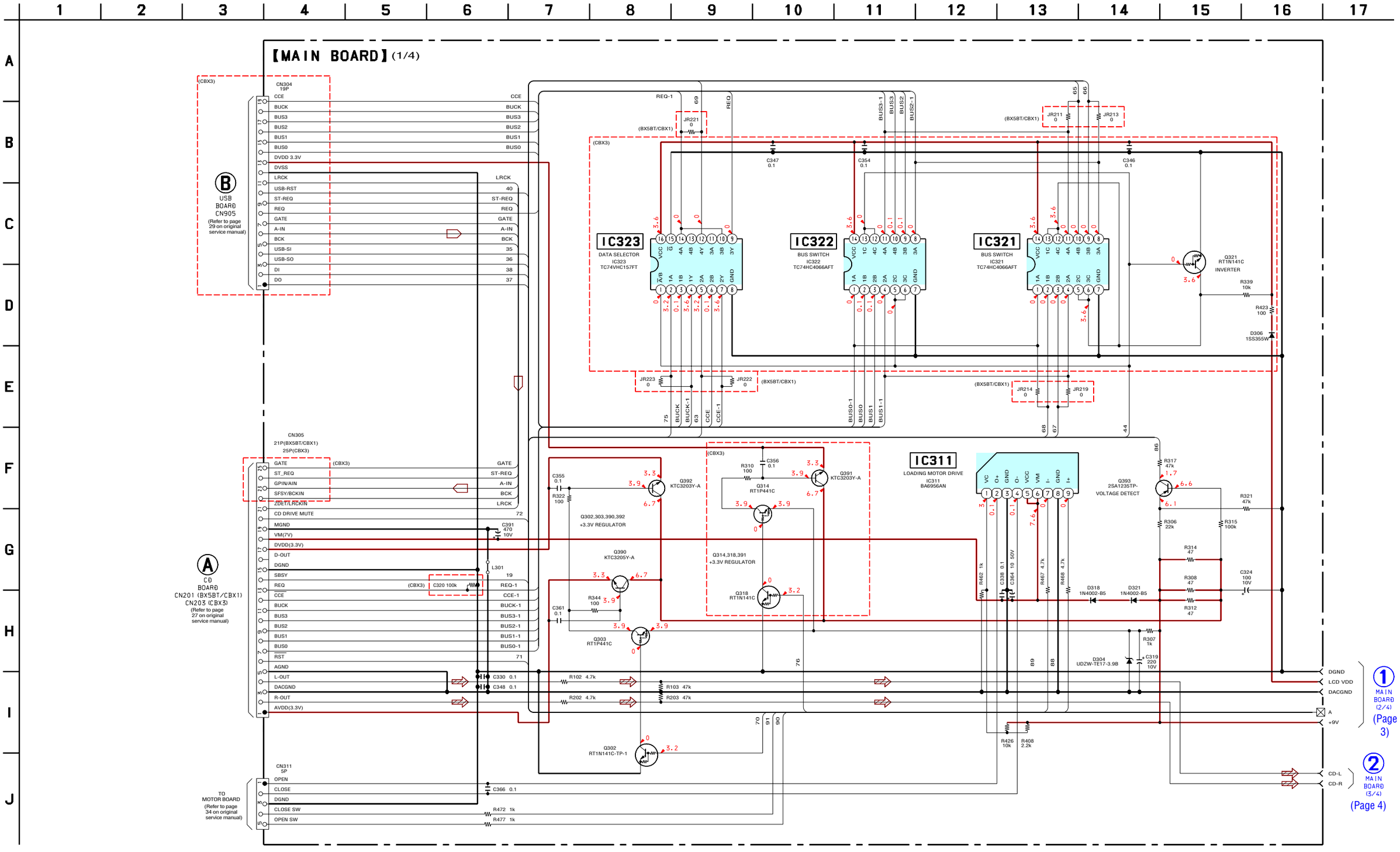


Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : panel designation.

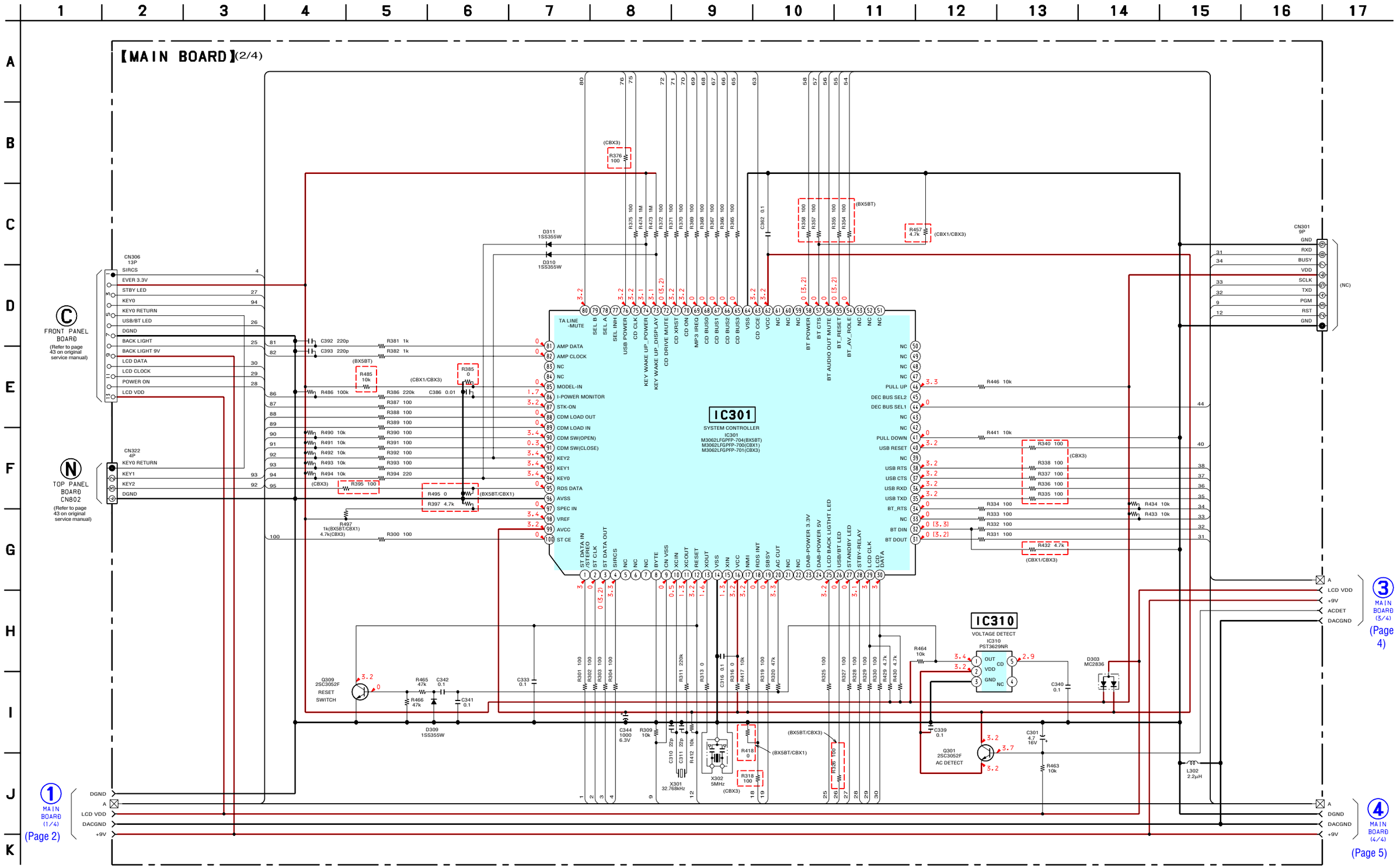
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages are dc with respect to ground under no-signal conditions.
  no mark : TUNER (FM/AM)
  ( ) : CD PLAY
  [ ] : BLUETOOTH
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  : AUDIO
  : TUNER (FM/AM)
  : CD PLAY
  : USB
  : AUDIO IN
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  KR : Korean model
  TW : Taiwan model

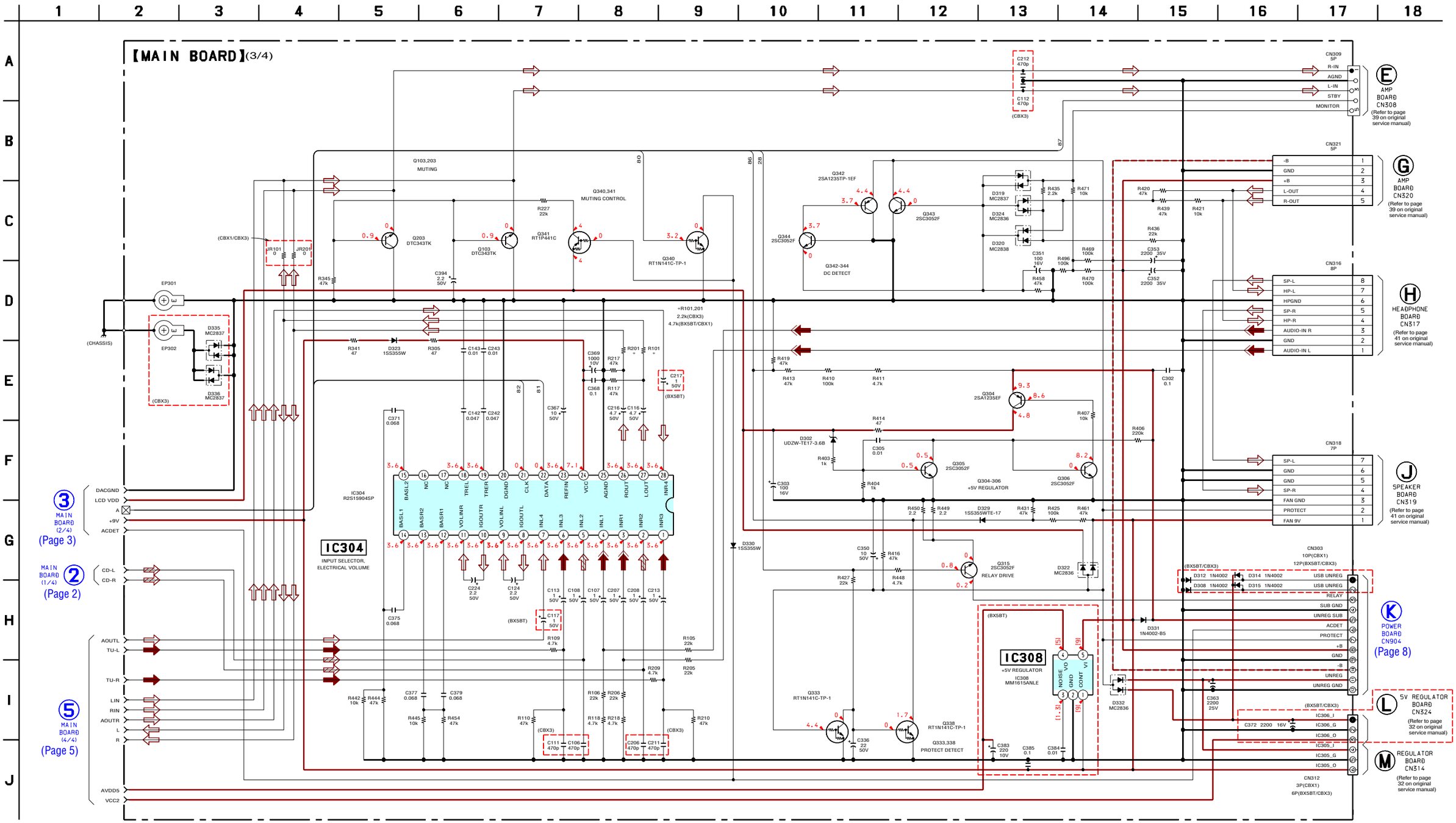
2-1. SCHEMATIC DIAGRAM – MAIN Section (1/4) –



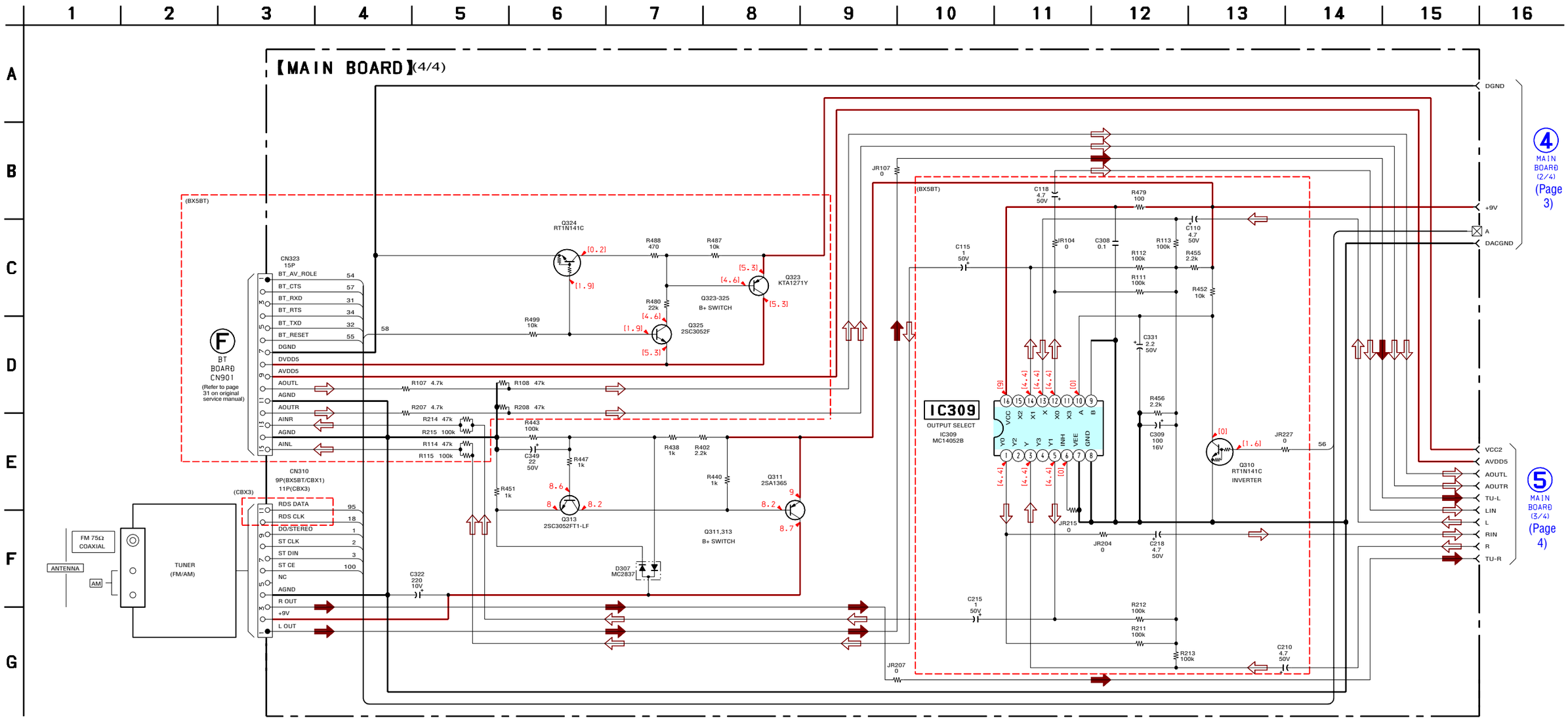
2-2. SCHEMATIC DIAGRAM – MAIN Section (2/4) –



2-3. SCHEMATIC DIAGRAM – MAIN Section (3/4) –

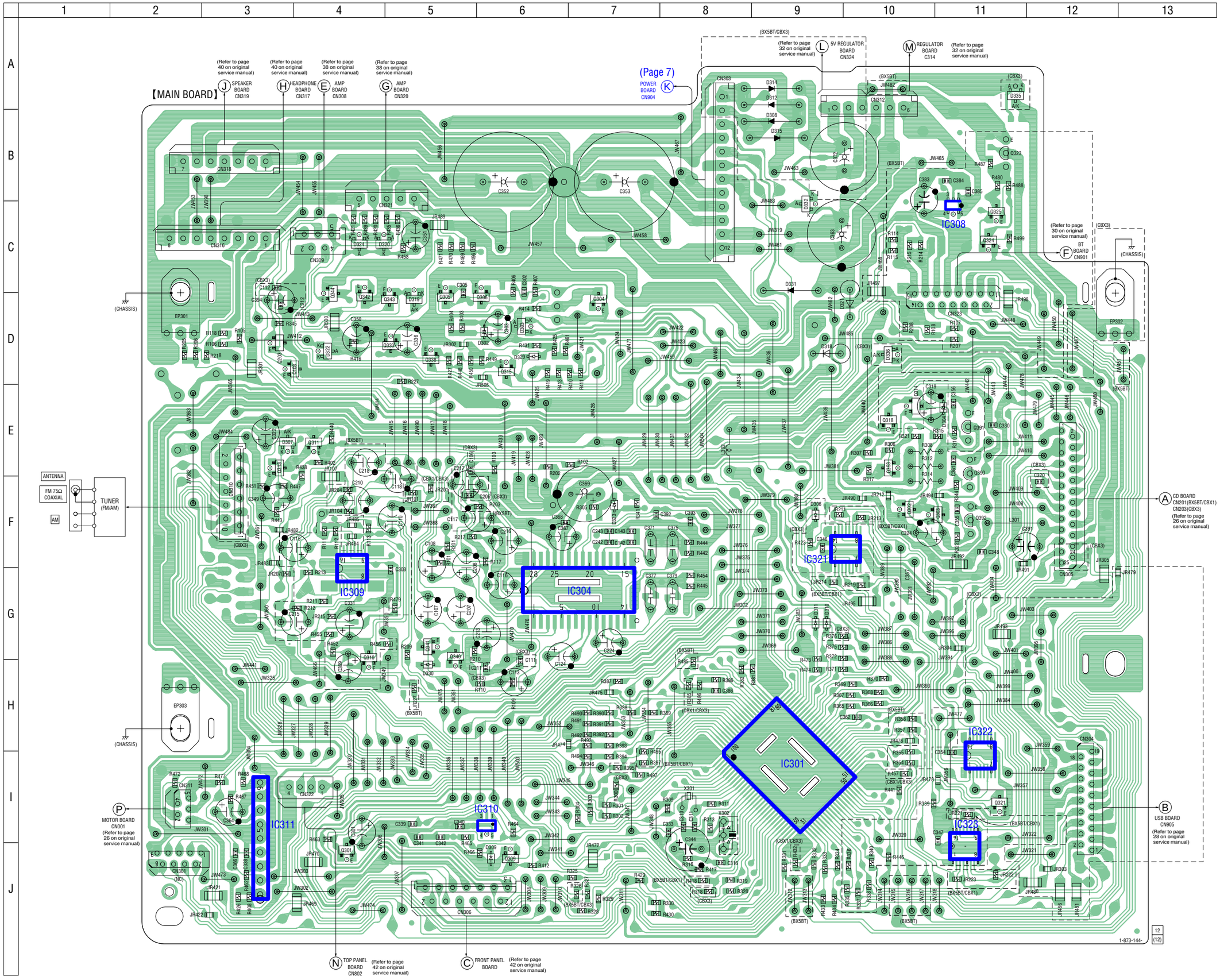


2-4. SCHEMATIC DIAGRAM – MAIN Section (4/4) –



2-5. PRINTED WIRING BOARD – MAIN Board –

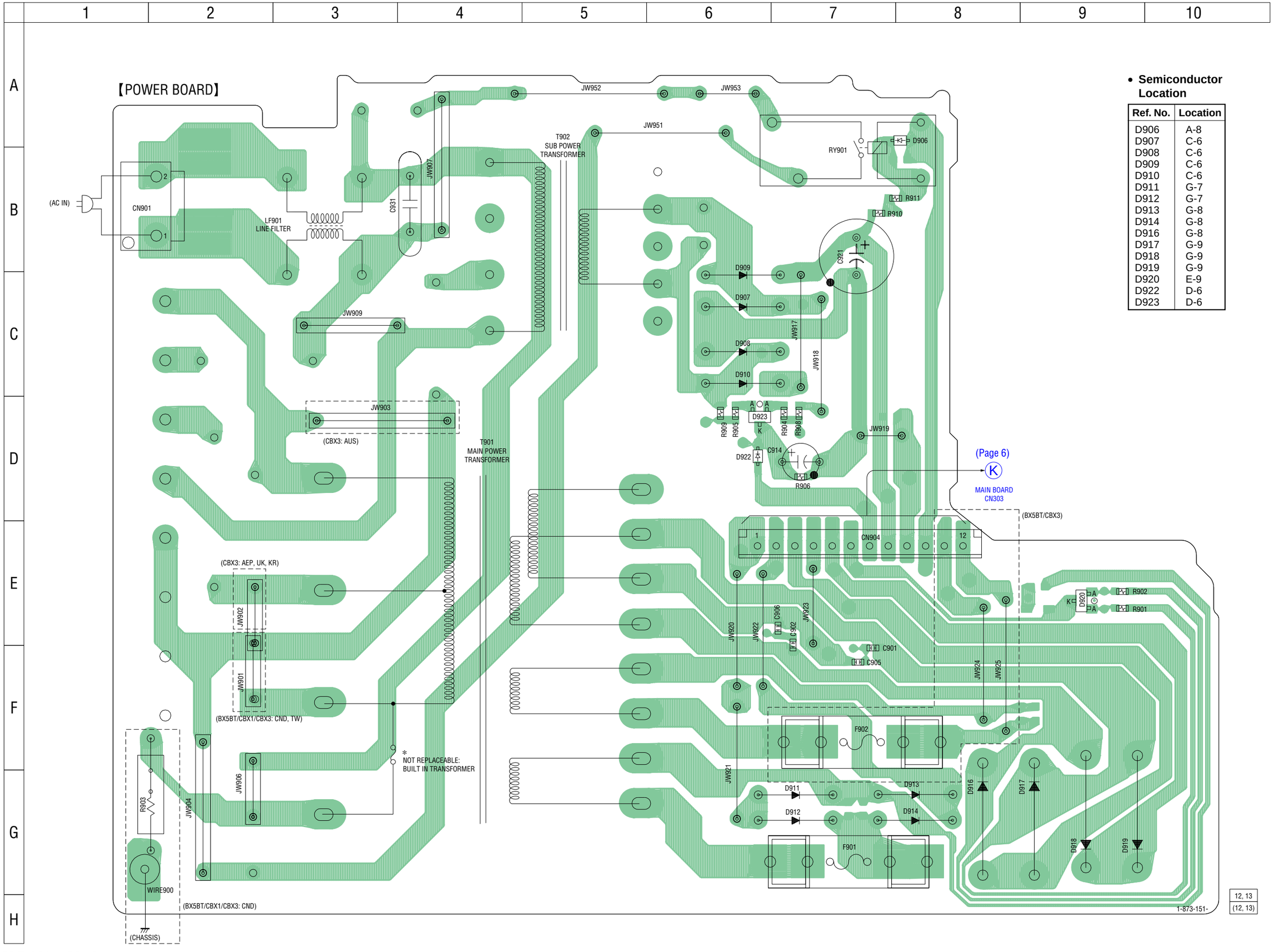
: Uses unleaded solder.



- **Semiconductor Location**

Ref. No.	Location
D302	D-6
D303	D-6
D304	E-11
D306	F-9
D307	E-3
D308	B-9
D309	J-6
D310	G-9
D311	G-9
D312	A-9
D314	A-9
D315	B-9
D318	D-9
D319	D-5
D320	C-4
D321	D-10
D322	D-4
D323	F-7
D324	C-4
D329	D-6
D330	H-5
D331	C-9
D332	C-9
D335	A-11
D336	D-10
IC301	I-9
IC304	G-7
IC308	C-11
IC309	G-4
IC310	I-6
IC311	I-3
IC321	F-10
IC322	I-11
IC323	J-11
Q103	D-4
Q203	D-3
Q301	J-4
Q302	F-10
Q303	F-11
Q304	D-7
Q305	D-5
Q306	D-6
Q309	J-6
Q310	G-4
Q311	E-4
Q313	E-3
Q314	E-10
Q315	D-6
Q318	E-10
Q321	I-11
Q323	B-11
Q324	C-11
Q325	C-11
Q333	D-5
Q338	D-5
Q340	G-5
Q341	G-5
Q342	D-4
Q343	D-5
Q344	D-4
Q390	E-11
Q391	E-11
Q392	F-11
Q393	E-10

2-6. PRINTED WIRING BOARD – POWER Board – : Uses unleaded solder.

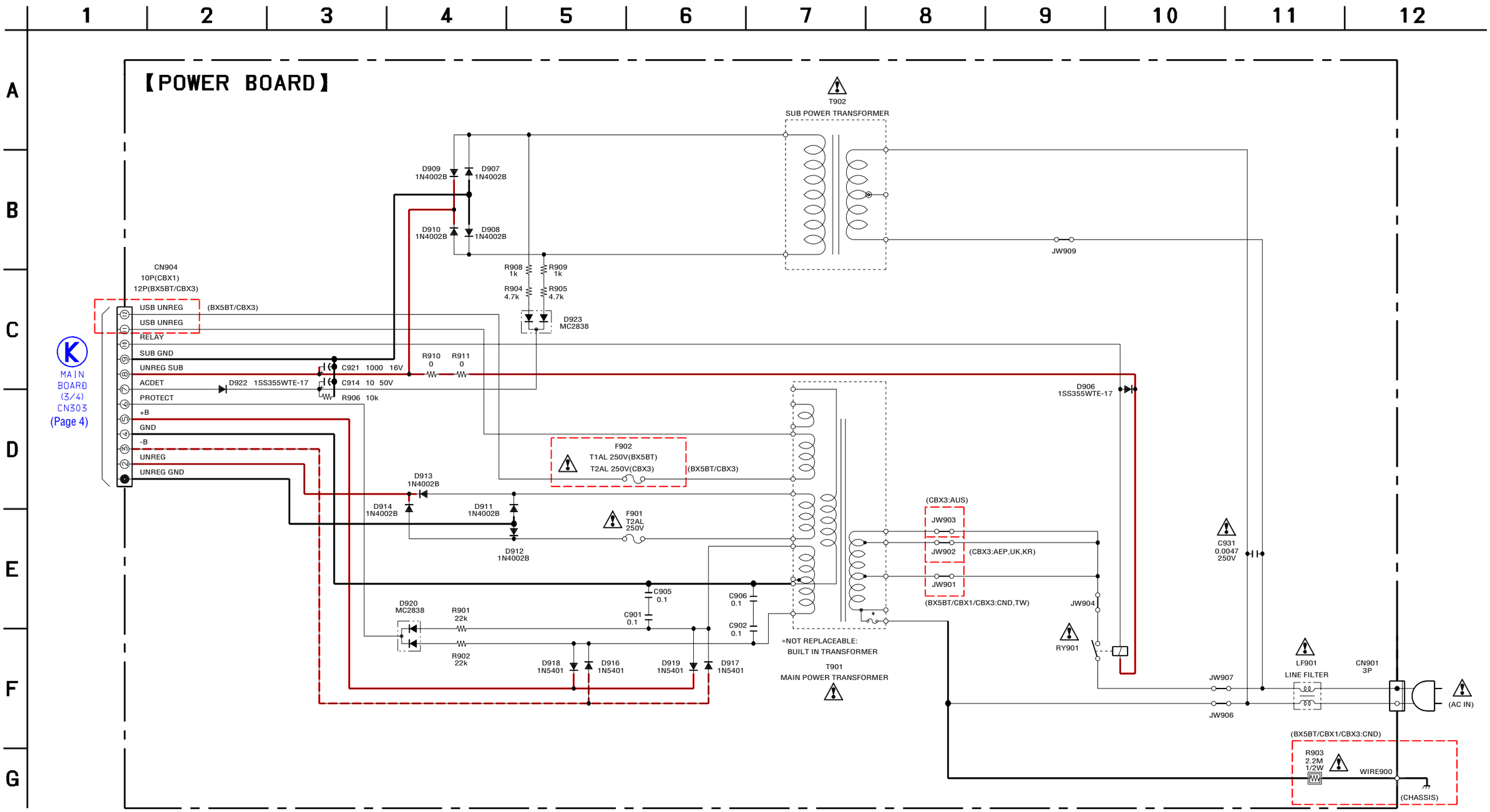


- **Semiconductor Location**

Ref. No.	Location
D906	A-8
D907	C-6
D908	C-6
D909	C-6
D910	C-6
D911	G-7
D912	G-7
D913	G-8
D914	G-8
D916	G-8
D917	G-9
D918	G-9
D919	G-9
D920	E-9
D922	D-6
D923	D-6

12, 13
(12, 13)

2-7. SCHEMATIC DIAGRAM – POWER Board –



3. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  KR : Korean model
  TW : Taiwan model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-1236-003-A	MAIN BOARD, COMPLETE (CBX1)			
	A-1236-325-A	MAIN BOARD, COMPLETE (CBX3)			
	A-1239-022-A	MAIN BOARD, COMPLETE (BX5BT)			
		**********			
		< CAPACITOR >			
C106	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3)
C107	1-126-960-11	ELECT	1uF	20%	50V
C108	1-126-960-11	ELECT	1uF	20%	50V
C110	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT)
C111	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3)
C112	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3)
C113	1-126-960-11	ELECT	1uF	20%	50V
C115	1-126-960-11	ELECT	1uF	20%	50V (BX5BT)
C116	1-126-963-11	ELECT	4.7uF	20%	50V
C117	1-126-960-11	ELECT	1uF	20%	50V (BX5BT)
C118	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT)
C124	1-126-961-11	ELECT	2.2uF	20%	50V
C142	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C143	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C206	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3)
C207	1-126-960-11	ELECT	1uF	20%	50V
C208	1-126-960-11	ELECT	1uF	20%	50V
C210	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT)
C211	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3)
C212	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3)
C213	1-126-960-11	ELECT	1uF	20%	50V
C215	1-126-960-11	ELECT	1uF	20%	50V (BX5BT)
C216	1-126-963-11	ELECT	4.7uF	20%	50V
C217	1-126-960-11	ELECT	1uF	20%	50V (BX5BT)
C218	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT)
C224	1-126-961-11	ELECT	2.2uF	20%	50V

Ref. No.	Part No.	Description			Remark
C242	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C243	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C301	1-124-259-11	ELECT	4.7uF	20%	50V
C302	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C303	1-126-933-11	ELECT	100uF	20%	16V
C305	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C308	1-164-156-11	CERAMIC CHIP	0.1uF		25V (BX5BT)
C309	1-126-933-11	ELECT	100uF	20%	16V (BX5BT)
C310	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C311	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C316	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C319	1-126-934-11	ELECT	220uF	20%	16V
C320	1-216-845-11	METAL CHIP	100K	5%	1/10W (CBX3)
C322	1-126-934-11	ELECT	220uF	20%	16V
C324	1-104-665-11	ELECT	100uF	20%	25V
C330	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C331	1-126-961-11	ELECT	2.2uF	20%	50V (BX5BT)
C333	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C336	1-126-965-11	ELECT	22uF	20%	50V
C338	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C339	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C340	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C341	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C342	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C344	1-126-916-11	ELECT	1000uF	20%	6.3V
C346	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C347	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C348	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C349	1-126-965-11	ELECT	22uF	20%	50V
C350	1-126-964-11	ELECT	10uF	20%	50V
C351	1-126-933-11	ELECT	100uF	20%	16V
C352	1-126-953-11	ELECT	2200uF	20%	35V
C353	1-126-953-11	ELECT	2200uF	20%	35V
C354	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C355	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C356	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (CBX3)
C361	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

MAIN

Ref. No.	Part No.	Description			Remark
C362	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C363	1-126-943-11	ELECT	2200uF	20%	25V
C364	1-124-261-00	ELECT	10uF	20%	50V
C366	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C367	1-126-964-11	ELECT	10uF	20%	50V
C368	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C369	1-126-926-11	ELECT	1000uF	20%	10V
C371	1-130-493-00	MYLAR	0.068uF	5%	50V
C372	1-126-768-11	ELECT	2200uF	20%	16V (BX5BT/CBX3)
C375	1-130-493-00	MYLAR	0.068uF	5%	50V
C377	1-130-493-00	MYLAR	0.068uF	5%	50V
C379	1-130-493-00	MYLAR	0.068uF	5%	50V
C383	1-126-934-11	ELECT	220uF	20%	16V (BX5BT)
C384	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V (BX5BT)
C385	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (BX5BT)
C386	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C391	1-126-935-11	ELECT	470uF	20%	16V
C392	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C393	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C394	1-126-961-11	ELECT	2.2uF	20%	50V
		< CONNECTOR >			
CN301	1-779-277-11	CONNECTOR, FFC (LIF (NON-ZIF)) 9P			
CN303	1-819-138-11	PIN, CONNECTOR 10P (CBX1)			
CN303	1-819-140-11	PIN, CONNECTOR 12P (BX5BT/CBX3)			
CN304	1-779-287-11	CONNECTOR, FFC (LIF (NON-ZIF)) 19P (CBX3)			
CN305	1-779-289-11	CONNECTOR, FFC (LIF (NON-ZIF)) 21P (BX5BT/CBX1)			
CN305	1-779-293-11	CONNECTOR, FFC (LIF (NON-ZIF)) 25P (CBX3)			
CN306	1-784-774-11	CONNECTOR, FFC 13P			
CN309	1-784-766-11	CONNECTOR, FFC 5P			
CN310	1-568-828-11	CONNECTOR, FFC 9P (BX5BT/CBX1)			
CN310	1-568-830-11	CONNECTOR, FFC 11P (CBX3)			
CN311	1-779-273-11	CONNECTOR, FFC (LIF (NON-ZIF)) 5P			
CN312	1-819-131-11	PIN, CONNECTOR 3P (CBX1)			
CN312	1-819-134-11	PIN, CONNECTOR 6P (BX5BT/CBX3)			
CN316	1-819-136-11	PIN, CONNECTOR 8P			
CN318	1-819-135-11	PIN, CONNECTOR 7P			
CN321	1-819-133-11	PIN, CONNECTOR			
CN322	1-815-445-11	PIN, CONNECTOR (PWB) 4P			
CN323	1-779-283-11	CONNECTOR, FFC (LIF (NON-ZIF)) 15P (BX5BT)			
		< DIODE >			
D302	6-501-163-01	DIODE	UDZW-TE17-3.6B		
D303	6-500-334-01	DIODE	MC2836-T112-1		
D304	6-501-164-01	DIODE	UDZW-TE17-3.9B		
D306	6-501-193-01	DIODE	1SS355WTE-17 (CBX3)		
D307	6-501-579-01	DIODE	MC2837		
D308	6-501-582-01	DIODE	1N4002-B5 (BX5BT/CBX3)		
D309	6-501-193-01	DIODE	1SS355WTE-17		
D310	6-501-193-01	DIODE	1SS355WTE-17		
D311	6-501-193-01	DIODE	1SS355WTE-17		
D312	6-501-582-01	DIODE	1N4002-B5 (BX5BT/CBX3)		
D314	6-501-582-01	DIODE	1N4002-B5 (BX5BT/CBX3)		

Ref. No.	Part No.	Description	Remark
D315	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)	
D318	6-501-582-01	DIODE 1N4002-B5	
D319	6-501-579-01	DIODE MC2837	
D320	6-500-335-01	DIODE MC2838-T112-1	
D321	6-501-582-01	DIODE 1N4002-B5	
D322	6-500-334-01	DIODE MC2836-T112-1	
D323	6-501-193-01	DIODE 1SS355WTE-17	
D324	6-500-334-01	DIODE MC2836-T112-1	
D329	6-501-193-01	DIODE 1SS355WTE-17	
D330	6-501-193-01	DIODE 1SS355WTE-17	
D331	6-501-582-01	DIODE 1N4002-B5	
D332	6-500-334-01	DIODE MC2836-T112-1	
D335	6-501-579-01	DIODE MC2837 (CBX3)	
D336	6-501-579-01	DIODE MC2837 (CBX3)	
		< EARTH TERMINAL >	
EP301	1-537-771-21	TERMINAL BOARD, GROUND	
EP302	1-537-771-21	TERMINAL BOARD, GROUND (CBX3)	
		< IC >	
IC301	6-807-532-01	IC M3062LFGPFP-704 (BX5BT)	
IC301	6-807-533-01	IC M3062LFGPFP-700 (CBX1)	
IC301	6-807-534-01	IC M3062LFGPFP-701 (CBX3)	
IC304	6-710-289-01	IC R2S15904SP	
IC308	6-707-282-01	IC MM1615ANLE (BX5BT)	
IC309	8-759-430-37	IC MC14052BDTR2 (BX5BT)	
IC310	6-701-680-01	IC PST3629NR	
IC311	8-759-598-69	IC BA6956AN	
IC321	8-759-523-03	IC TC74HC4066AFT (EL) (CBX3)	
IC322	8-759-523-03	IC TC74HC4066AFT (EL) (CBX3)	
IC323	6-707-870-01	IC TC74VHC157FT (EKJ) (CBX3)	
		< JUMPER RESISTOR >	
JR101	1-216-864-11	SHORT CHIP 0 (CBX1/CBX3)	
JR104	1-216-864-11	SHORT CHIP 0 (BX5BT)	
JR107	1-216-296-11	SHORT CHIP 0	
JR201	1-216-864-11	SHORT CHIP 0 (CBX1/CBX3)	
JR204	1-216-864-11	SHORT CHIP 0 (BX5BT)	
JR207	1-216-864-11	SHORT CHIP 0	
JR211	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR212	1-216-864-11	SHORT CHIP 0	
JR213	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR214	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR215	1-216-864-11	SHORT CHIP 0 (BX5BT)	
JR219	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR221	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR222	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR223	1-216-864-11	SHORT CHIP 0 (BX5BT/CBX1)	
JR227	1-216-864-11	SHORT CHIP 0 (BX5BT)	
JR301	1-216-296-11	SHORT CHIP 0	
JR302	1-216-864-11	SHORT CHIP 0	
JR303	1-216-864-11	SHORT CHIP 0 (CBX3)	
JR304	1-216-864-11	SHORT CHIP 0	
JR305	1-216-296-11	SHORT CHIP 0	
JR421	1-216-296-11	SHORT CHIP 0	
JR422	1-216-864-11	SHORT CHIP 0	
JR469	1-216-296-11	SHORT CHIP 0	
JR470	1-216-296-11	SHORT CHIP 0	

Ref. No.	Part No.	Description		Remark
JR472	1-216-296-11	SHORT CHIP	0	
JR474	1-216-864-11	SHORT CHIP	0	
JR475	1-216-864-11	SHORT CHIP	0	
JR476	1-216-864-11	SHORT CHIP	0	
JR478	1-216-864-11	SHORT CHIP	0 (CBX3)	
JR479	1-216-864-11	SHORT CHIP	0 (CBX3)	
JR480	1-216-296-11	SHORT CHIP	0 (CBX3)	
JR481	1-216-296-11	SHORT CHIP	0 (CBX3)	
JR482	1-216-864-11	SHORT CHIP	0	
JR483	1-216-864-11	SHORT CHIP	0	
JR484	1-216-864-11	SHORT CHIP	0	
JR485	1-216-864-11	SHORT CHIP	0	
JR486	1-216-296-11	SHORT CHIP	0 (CBX3)	
JR489	1-216-296-11	SHORT CHIP	0	
JR490	1-216-864-11	SHORT CHIP	0	
JR491	1-216-864-11	SHORT CHIP	0	
JR492	1-216-296-11	SHORT CHIP	0	
JR493	1-216-296-11	SHORT CHIP	0 (CBX3)	
JR494	1-216-864-11	SHORT CHIP	0	
JR495	1-216-296-11	SHORT CHIP	0	
JR497	1-216-296-11	SHORT CHIP	0 (BX5BT)	
JR498	1-216-296-11	SHORT CHIP	0 (BX5BT)	
JR500	1-216-296-11	SHORT CHIP	0	
JR505	1-216-864-11	SHORT CHIP	0	
		< COIL >		
L302	1-410-501-11	INDUCTOR	2.2uH	
		< TRANSISTOR >		
Q103	8-729-920-31	TRANSISTOR	DTC343TK	
Q203	8-729-920-31	TRANSISTOR	DTC343TK	
Q301	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q302	8-729-027-43	TRANSISTOR	DTC114EKA-T146	
Q303	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q304	8-729-600-22	TRANSISTOR	2SA1235-F	
Q305	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q306	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q309	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q310	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (BX5BT)	
Q311	8-729-024-43	TRANSISTOR	2SA1365-T112-1EF	
Q313	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q314	8-729-027-38	TRANSISTOR	DTA144EKA-T146 (CBX3)	
Q315	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q318	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (CBX3)	
Q321	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (CBX3)	
Q323	8-729-037-13	TRANSISTOR	KTA1271Y (BX5BT)	
Q324	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (BX5BT)	
Q325	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (BX5BT)	
Q333	8-729-027-43	TRANSISTOR	DTC114EKA-T146	
Q338	8-729-027-43	TRANSISTOR	DTC114EKA-T146	
Q340	8-729-027-43	TRANSISTOR	DTC114EKA-T146	
Q341	8-729-027-38	TRANSISTOR	DTA144EKA-T146	
Q342	8-729-600-22	TRANSISTOR	2SA1235-F	
Q343	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q344	8-729-120-28	TRANSISTOR	2SC1623-L5L6	
Q390	8-729-028-54	TRANSISTOR	KTC3205	
Q391	8-729-036-86	TRANSISTOR	KTC3203Y-AT (CBX3)	
Q392	8-729-036-86	TRANSISTOR	KTC3203Y-AT	
Q393	8-729-600-22	TRANSISTOR	2SA1235-F	
		< RESISTOR >		
R101	1-216-825-11	METAL CHIP	2.2K 5% 1/10W (CBX3)	
R101	1-216-829-11	METAL CHIP	4.7K 5% 1/10W (BX5BT/CBX1)	
R102	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R103	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R105	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R106	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R107	1-216-829-11	METAL CHIP	4.7K 5% 1/10W (BX5BT)	
R108	1-216-841-11	METAL CHIP	47K 5% 1/10W (BX5BT)	
R109	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R110	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R111	1-216-845-11	METAL CHIP	100K 5% 1/10W (BX5BT)	
R112	1-216-845-11	METAL CHIP	100K 5% 1/10W (BX5BT)	
R113	1-216-845-11	METAL CHIP	100K 5% 1/10W (BX5BT)	
R114	1-216-841-11	METAL CHIP	47K 5% 1/10W (BX5BT)	
R115	1-216-845-11	METAL CHIP	100K 5% 1/10W (BX5BT)	
R117	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R118	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R201	1-216-825-11	METAL CHIP	2.2K 5% 1/10W (CBX3)	
R201	1-216-829-11	METAL CHIP	4.7K 5% 1/10W (BX5BT/CBX1)	
R202	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R203	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R205	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R206	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R207	1-216-829-11	METAL CHIP	4.7K 5% 1/10W (BX5BT)	
R208	1-216-841-11	METAL CHIP	47K 5% 1/10W (BX5BT)	
R209	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R210	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R211	1-216-845-11	METAL CHIP	100K 5% 1/10W (BX5BT)	
R212	1-216-845-11	METAL CHIP	100K 5% 1/10W (BX5BT)	
R213	1-216-845-11	METAL CHIP	100K 5% 1/10W (BX5BT)	
R214	1-216-841-11	METAL CHIP	47K 5% 1/10W (BX5BT)	
R215	1-216-845-11	METAL CHIP	100K 5% 1/10W (BX5BT)	
R217	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R218	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	
R227	1-216-837-11	METAL CHIP	22K 5% 1/10W	
R300	1-216-809-11	METAL CHIP	100 5% 1/10W	
R301	1-216-809-11	METAL CHIP	100 5% 1/10W	
R302	1-216-809-11	METAL CHIP	100 5% 1/10W	
R303	1-216-809-11	METAL CHIP	100 5% 1/10W	

MAIN

Ref. No.	Part No.	Description			Remark
R304	1-216-809-11	METAL CHIP	100	5%	1/10W
R305	1-216-805-11	METAL CHIP	47	5%	1/10W
R306	1-216-837-11	METAL CHIP	22K	5%	1/10W
R307	1-216-821-11	METAL CHIP	1K	5%	1/10W
R308	1-249-401-11	CARBON	47	5%	1/4W
R309	1-216-833-11	METAL CHIP	10K	5%	1/10W
R310	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R311	1-216-849-11	METAL CHIP	220K	5%	1/10W
R312	1-249-401-11	CARBON	47	5%	1/4W
R313	1-216-864-11	SHORT CHIP	0		
R314	1-249-401-11	CARBON	47	5%	1/4W
R315	1-216-845-11	METAL CHIP	100K	5%	1/10W
R316	1-216-864-11	SHORT CHIP	0		
R317	1-216-841-11	METAL CHIP	47K	5%	1/10W
R318	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R319	1-216-809-11	METAL CHIP	100	5%	1/10W
R320	1-216-841-11	METAL CHIP	47K	5%	1/10W
R321	1-216-841-11	METAL CHIP	47K	5%	1/10W
R322	1-216-809-11	METAL CHIP	100	5%	1/10W
R325	1-216-809-11	METAL CHIP	100	5%	1/10W
R326	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT/CBX3)
R327	1-216-809-11	METAL CHIP	100	5%	1/10W
R328	1-216-809-11	METAL CHIP	100	5%	1/10W
R329	1-216-809-11	METAL CHIP	100	5%	1/10W
R330	1-216-809-11	METAL CHIP	100	5%	1/10W
R331	1-216-809-11	METAL CHIP	100	5%	1/10W
R332	1-216-809-11	METAL CHIP	100	5%	1/10W
R333	1-216-809-11	METAL CHIP	100	5%	1/10W
R334	1-216-809-11	METAL CHIP	100	5%	1/10W
R335	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R336	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R337	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R338	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R339	1-216-833-11	METAL CHIP	10K	5%	1/10W (CBX3)
R340	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R341	1-216-805-11	METAL CHIP	47	5%	1/10W
R344	1-216-809-11	METAL CHIP	100	5%	1/10W
R345	1-216-841-11	METAL CHIP	47K	5%	1/10W
R354	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R355	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R357	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R358	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R365	1-216-809-11	METAL CHIP	100	5%	1/10W
R366	1-216-809-11	METAL CHIP	100	5%	1/10W
R367	1-216-809-11	METAL CHIP	100	5%	1/10W
R368	1-216-809-11	METAL CHIP	100	5%	1/10W
R369	1-216-809-11	METAL CHIP	100	5%	1/10W
R370	1-216-809-11	METAL CHIP	100	5%	1/10W
R371	1-216-809-11	METAL CHIP	100	5%	1/10W
R372	1-216-809-11	METAL CHIP	100	5%	1/10W
R375	1-216-809-11	METAL CHIP	100	5%	1/10W
R376	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R381	1-216-821-11	METAL CHIP	1K	5%	1/10W
R382	1-216-821-11	METAL CHIP	1K	5%	1/10W
R385	1-216-864-11	SHORT CHIP	0 (CBX1/CBX3)		
R386	1-216-849-11	METAL CHIP	220K	5%	1/10W
R387	1-216-809-11	METAL CHIP	100	5%	1/10W
R388	1-216-809-11	METAL CHIP	100	5%	1/10W
R389	1-216-809-11	METAL CHIP	100	5%	1/10W
R390	1-216-809-11	METAL CHIP	100	5%	1/10W
R391	1-216-809-11	METAL CHIP	100	5%	1/10W
R392	1-216-809-11	METAL CHIP	100	5%	1/10W
R393	1-216-809-11	METAL CHIP	100	5%	1/10W
R394	1-216-813-11	METAL CHIP	220	5%	1/10W
R395	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R397	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R402	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R403	1-216-821-11	METAL CHIP	1K	5%	1/10W
R404	1-216-821-11	METAL CHIP	1K	5%	1/10W
R406	1-216-849-11	METAL CHIP	220K	5%	1/10W
R407	1-216-833-11	METAL CHIP	10K	5%	1/10W
R408	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R410	1-216-845-11	METAL CHIP	100K	5%	1/10W
R411	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R413	1-216-841-11	METAL CHIP	47K	5%	1/10W
R414	1-216-805-11	METAL CHIP	47	5%	1/10W
R416	1-216-841-11	METAL CHIP	47K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
R419	1-216-841-11	METAL CHIP	47K	5%	1/10W
R420	1-216-841-11	METAL CHIP	47K	5%	1/10W
R421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R423	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R425	1-216-845-11	METAL CHIP	100K	5%	1/10W
R426	1-216-833-11	METAL CHIP	10K	5%	1/10W
R427	1-216-837-11	METAL CHIP	22K	5%	1/10W
R429	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R430	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R431	1-216-841-11	METAL CHIP	47K	5%	1/10W
R432	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX1/CBX3)
R433	1-216-833-11	METAL CHIP	10K	5%	1/10W
R434	1-216-833-11	METAL CHIP	10K	5%	1/10W
R435	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R436	1-216-837-11	METAL CHIP	22K	5%	1/10W
R438	1-216-821-11	METAL CHIP	1K	5%	1/10W
R439	1-216-841-11	METAL CHIP	47K	5%	1/10W
R440	1-216-821-11	METAL CHIP	1K	5%	1/10W
R441	1-216-833-11	METAL CHIP	10K	5%	1/10W
R442	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R443	1-216-845-11	METAL CHIP	100K	5%	1/10W
R444	1-216-841-11	METAL CHIP	47K	5%	1/10W
R445	1-216-833-11	METAL CHIP	10K	5%	1/10W
R446	1-216-833-11	METAL CHIP	10K	5%	1/10W
R447	1-216-821-11	METAL CHIP	1K	5%	1/10W
R448	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R449	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R450	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R451	1-216-821-11	METAL CHIP	1K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R454	1-216-841-11	METAL CHIP	47K	5%	1/10W
R455	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (BX5BT)
R456	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (BX5BT)
R457	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX1/CBX3)
R458	1-216-841-11	METAL CHIP	47K	5%	1/10W
R461	1-216-841-11	METAL CHIP	47K	5%	1/10W
R462	1-216-821-11	METAL CHIP	1K	5%	1/10W
R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R464	1-216-833-11	METAL CHIP	10K	5%	1/10W
R465	1-216-841-11	METAL CHIP	47K	5%	1/10W
R466	1-216-841-11	METAL CHIP	47K	5%	1/10W
R467	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R468	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R469	1-216-845-11	METAL CHIP	100K	5%	1/10W
R470	1-216-845-11	METAL CHIP	100K	5%	1/10W
R471	1-216-833-11	METAL CHIP	10K	5%	1/10W
R472	1-216-821-11	METAL CHIP	1K	5%	1/10W
R473	1-216-857-11	METAL CHIP	1M	5%	1/10W
R474	1-216-857-11	METAL CHIP	1M	5%	1/10W
R477	1-216-821-11	METAL CHIP	1K	5%	1/10W
R479	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R480	1-216-837-11	METAL CHIP	22K	5%	1/10W (BX5BT)
R485	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R486	1-216-845-11	METAL CHIP	100K	5%	1/10W
R487	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R488	1-216-817-11	METAL CHIP	470	5%	1/10W (BX5BT)
R490	1-216-833-11	METAL CHIP	10K	5%	1/10W
R491	1-216-833-11	METAL CHIP	10K	5%	1/10W
R492	1-216-833-11	METAL CHIP	10K	5%	1/10W
R493	1-216-833-11	METAL CHIP	10K	5%	1/10W
R494	1-216-833-11	METAL CHIP	10K	5%	1/10W
R495	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
R496	1-216-845-11	METAL CHIP	100K	5%	1/10W
R497	1-216-821-11	METAL CHIP	1K	5%	1/10W (BX5BT/CBX1)
R497	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX3)
R499	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)

Ref. No.	Part No.	Description			Remark
		< VIBRATOR >			
X301	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			
X302	1-760-489-11	VIBRATOR, CERAMIC (5MHz)			
**********					
		POWER BOARD			
		**********			
		< CAPACITOR >			
C901	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C902	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C905	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C906	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C914	1-126-964-11	ELECT	10uF	20%	50V
C921	1-126-767-11	ELECT	1000uF	20%	16V
⚠C931	1-113-924-11	CERAMIC	0.0047uF	20%	250V
		< CONNECTOR >			
* CN901	1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P			
		< DIODE >			
D906	6-501-193-01	DIODE 1SS355WTE-17			
D907	6-501-582-01	DIODE 1N4002-B5			
D908	6-501-582-01	DIODE 1N4002-B5			
D909	6-501-582-01	DIODE 1N4002-B5			
D910	6-501-582-01	DIODE 1N4002-B5			
D911	6-501-582-01	DIODE 1N4002-B5			
D912	6-501-582-01	DIODE 1N4002-B5			
D913	6-501-582-01	DIODE 1N4002-B5			
D914	6-501-582-01	DIODE 1N4002-B5			
D916	6-501-569-01	DIODE 1N5401-C352			
D917	6-501-569-01	DIODE 1N5401-C352			
D918	6-501-569-01	DIODE 1N5401-C352			
D919	6-501-569-01	DIODE 1N5401-C352			
D920	6-500-335-01	DIODE MC2838-T112-1			
D922	6-501-193-01	DIODE 1SS355WTE-17			
D923	6-500-335-01	DIODE MC2838-T112-1			
		< FUSE HOLDER >			
FH901	1-533-233-31	FUSE HOLDER			
FH902	1-533-233-31	FUSE HOLDER			
FH903	1-533-233-31	FUSE HOLDER (BX5BT/CBX3)			
FH904	1-533-233-31	FUSE HOLDER (BX5BT/CBX3)			
		< LINE FILTER >			
⚠LF901	1-443-993-11	TRANSFORMER, LINE FILTER (LFT)			
		< RESISTOR >			
R901	1-216-837-11	METAL CHIP	22K	5%	1/10W
R902	1-216-837-11	METAL CHIP	22K	5%	1/10W
⚠R903	1-219-512-22	METAL	2.2M	5%	1/2W (BX5BT/CBX1/CBX3: CND)
R904	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R905	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R906	1-216-833-11	METAL CHIP	10K	5%	1/10W
R908	1-216-821-11	METAL CHIP	1K	5%	1/10W
R909	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description		Remark
R910	1-216-864-11	SHORT CHIP	0	
R911	1-216-864-11	SHORT CHIP	0	
		< RELAY >		
⚠RY901	1-755-334-11	RELAY, AC POWER		
		< TRANSFORMER >		
⚠T902	1-443-846-11	TRANSFORMER, POWER (BX5BT/CBX1/CBX3: CND, TW)		
⚠T902	1-443-908-11	TRANSFORMER, POWER (CBX3: AUS)		
⚠T902	1-443-912-11	TRANSFORMER, POWER (CBX3: AEP, UK, KR)		

HCD-BX5BT/CBX1/CBX3

SONY

SERVICE MANUAL

Ver. 1.3 2007.06

US Model
HCD-BX5BT/CBX1
Canadian Model
AEP Model
UK Model
E Model
Australian Model
HCD-CBX3

SUPPLEMENT-2

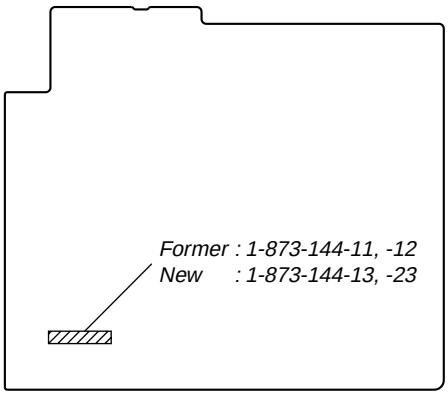
File this supplement with the service manual.

Subject: Change of AMP, MAIN and SPEAKER boards (Suffix-13/-23)

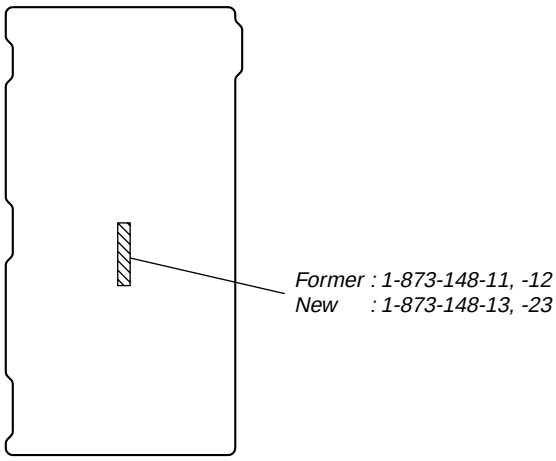
In this set, AMP, MAIN and SPEAKER boards have been changed in the midway of production.
Printed wiring boards and schematic diagrams and electrical parts list of new type are described in this supplement-2.
Refer to original service manual and supplement-1 for other information.

1. NEW/FORMER DISCRIMINATION

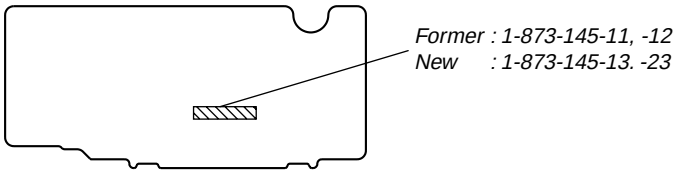
– MAIN Board (Component Side) –



– SPEAKER Board (Component Side) –



– AMP Board (Component Side) –



2. DIAGRAMS

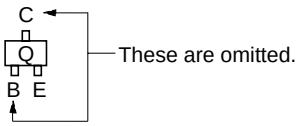
- **Note for Printed Wiring Boards and Schematic Diagrams**

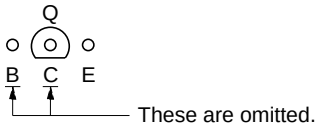
Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ▭ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

- Indication of transistor



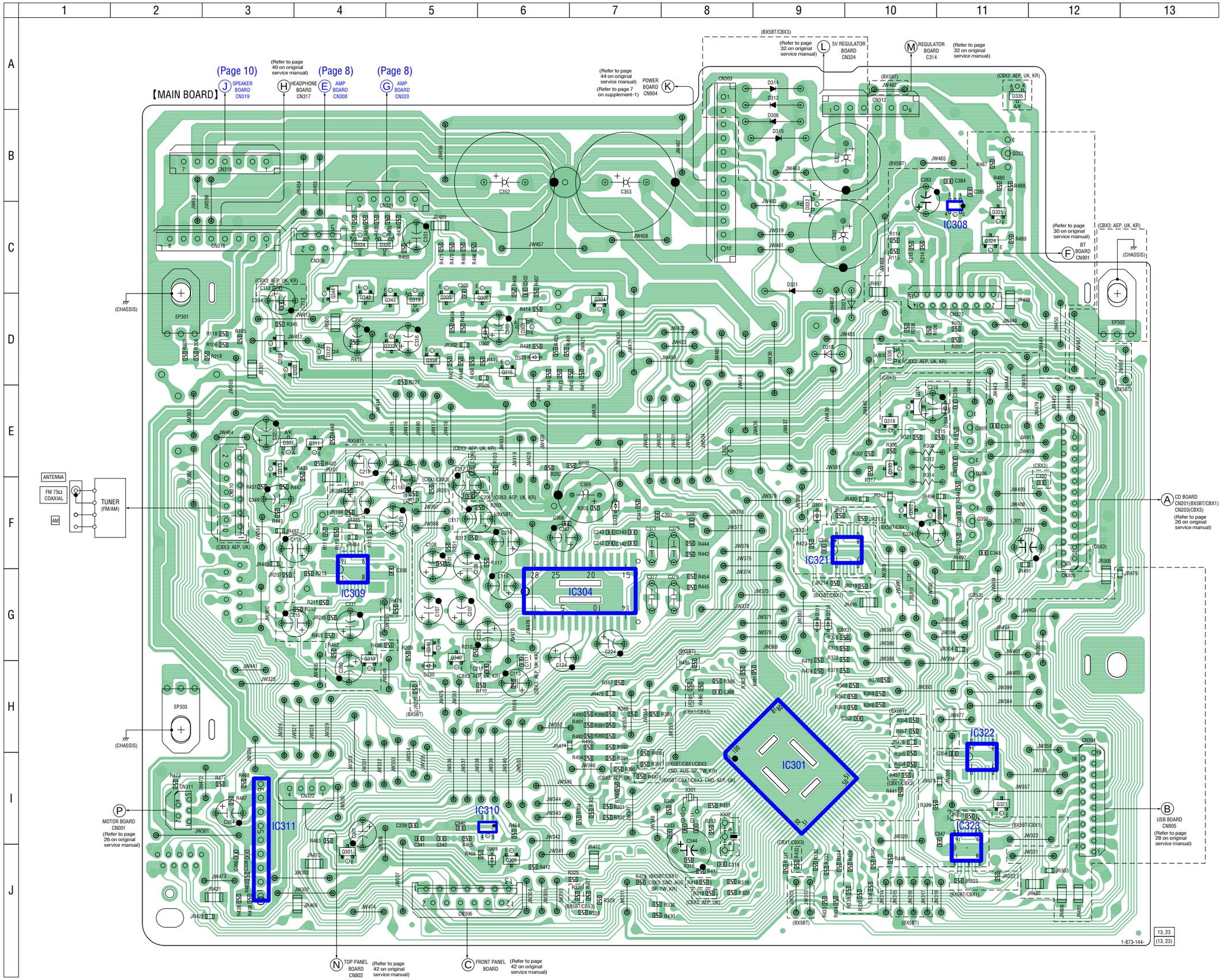


Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.
- ▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- Voltages are dc with respect to ground under no-signal conditions.
  no mark : TUNER (FM/AM)
  ( ) : CD PLAY
  [ ] : BLUETOOTH
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : AUDIO
  ➡ : TUNER (FM/AM)
  ⇨ : CD PLAY
  ⇨ : USB
  ⇨ : AUDIO IN
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  KR : Korean model
  SP : Singapore model
  TW : Taiwan model

2-1. PRINTED WIRING BOARD – MAIN Board –

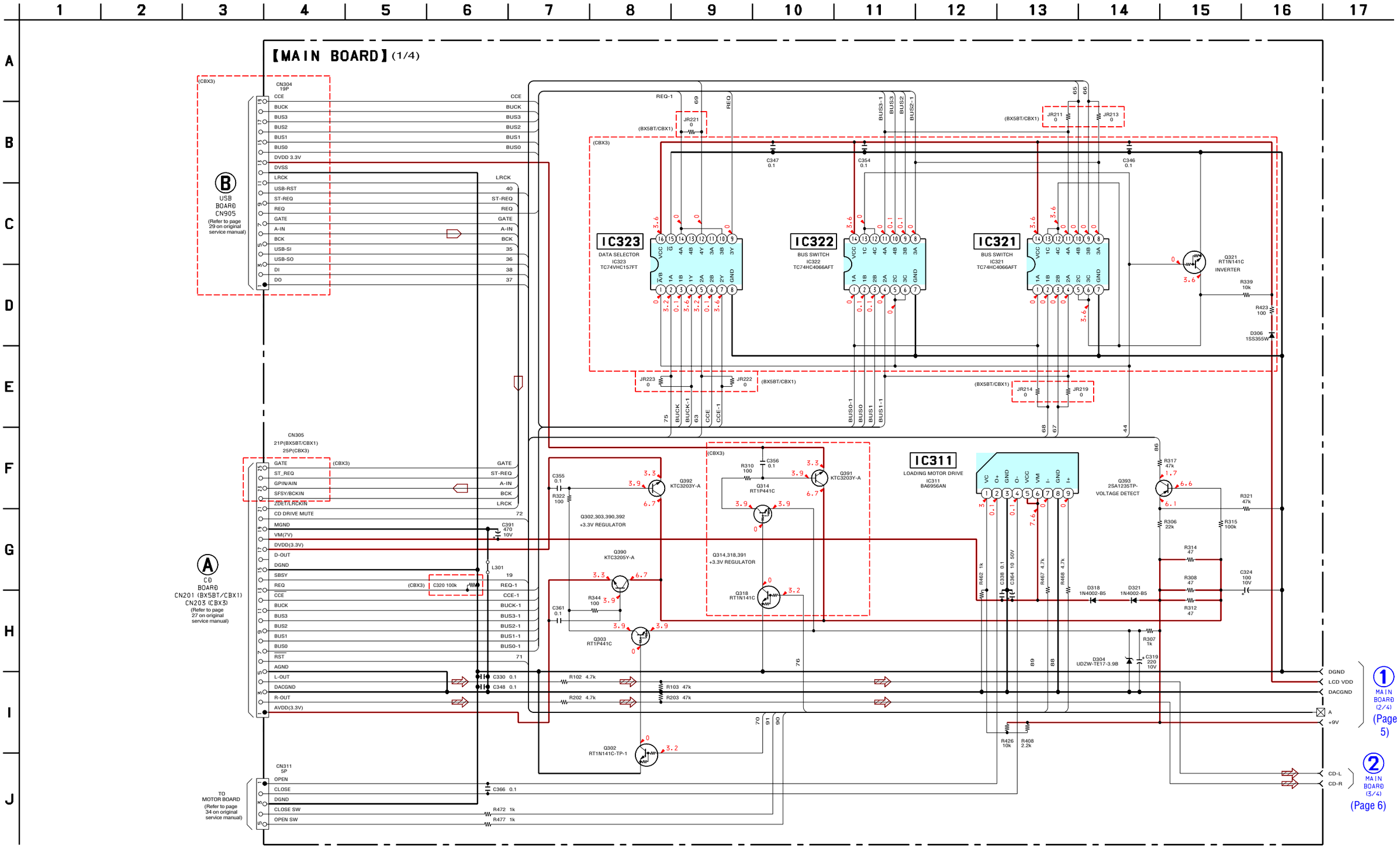
: Uses unleaded solder.


【MAIN BOARD】
(Page 10) J SPEAKER BOARD CN319
(Refer to page 40 on original service manual) H HEADPHONE BOARD CN317
(Page 8) E AMP BOARD CN308
(Page 8) G AMP BOARD CN320
(Refer to page 44 on original service manual) (Refer to page 7 on supplement-1) POWER BOARD CN904 K
(BX5BT/CBX3) (Refer to page 32 on original service manual) L 5V REGULATOR BOARD CN324
M REGULATOR BOARD C314 (Refer to page 32 on original service manual)
(BX5BT) (CBX3: AEP, UK, KR)
(Refer to page 30 on original service manual) F BT BOARD CN901
(CBX3: AEP, UK, KR) (CHASSIS)
IC301
IC304
IC308
IC309
IC310
IC311
IC321
IC322
IC323
ANTENNA
FM 75Ω COAXIAL
AM
TUNER (FM/AM)
A CD BOARD CN201(BX5BT/CBX1) CN203(CBX3) (Refer to page 26 on original service manual)
B USB BOARD CN905 (Refer to page 28 on original service manual)
P MOTOR BOARD CN001 (Refer to page 26 on original service manual)
N TOP PANEL BOARD CN802 (Refer to page 42 on original service manual)
C FRONT PANEL BOARD (Refer to page 42 on original service manual)
1-873-144-
13, 23
(13, 23)

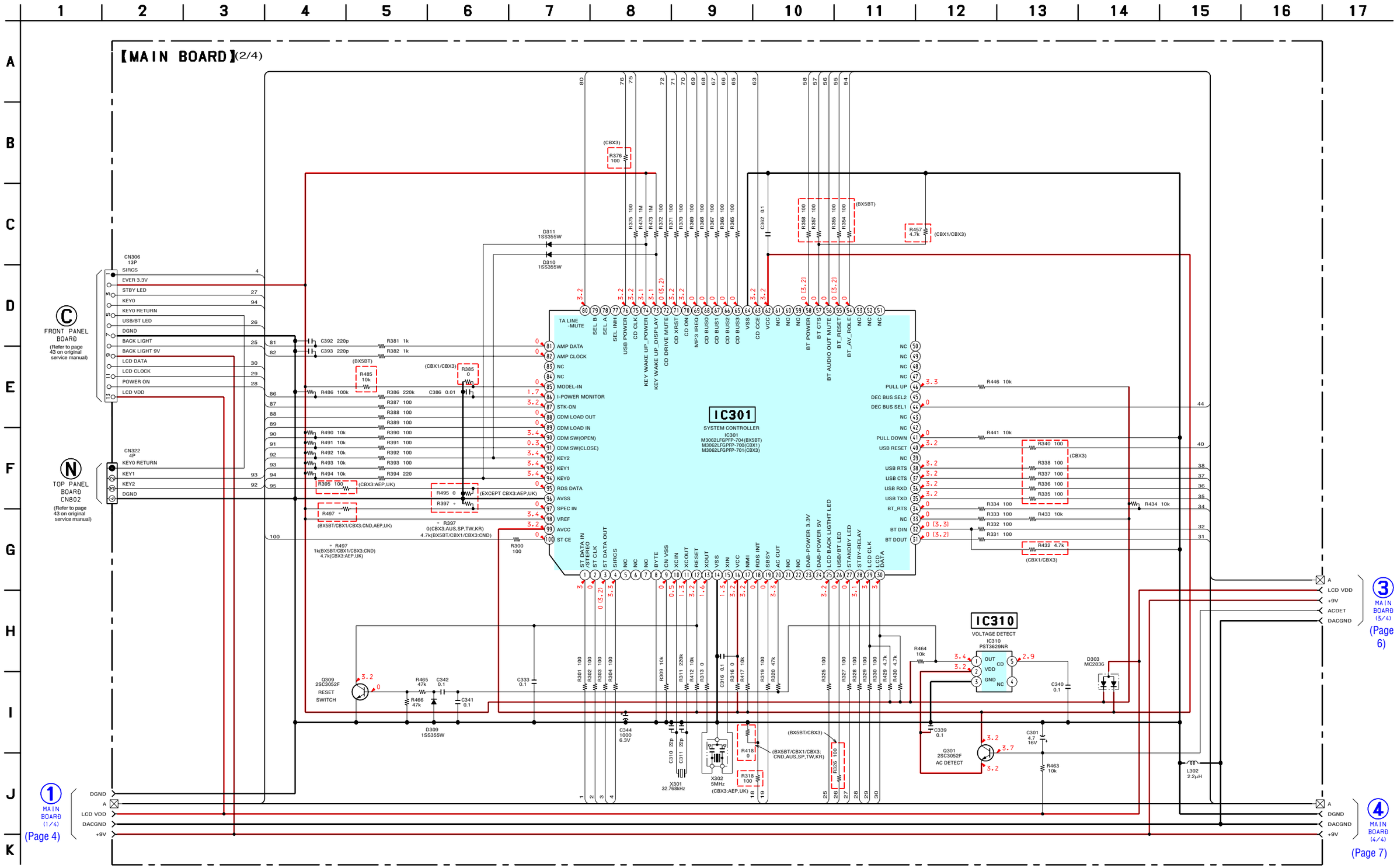
- **Semiconductor Location**

Ref. No.	Location
D302	D-6
D303	D-6
D304	E-11
D306	F-9
D307	E-3
D308	B-9
D309	J-6
D310	G-9
D311	G-9
D312	A-9
D314	A-9
D315	B-9
D318	D-9
D319	D-5
D320	C-4
D321	D-10
D322	D-4
D323	F-7
D324	C-4
D329	D-6
D330	H-5
D331	C-9
D332	C-9
D335	A-11
D336	D-10
IC301	I-9
IC304	G-7
IC308	C-11
IC309	G-4
IC310	I-6
IC311	I-3
IC321	F-10
IC322	I-11
IC323	J-11
Q103	D-4
Q203	D-3
Q301	J-4
Q302	F-10
Q303	F-11
Q304	D-7
Q305	D-5
Q306	D-6
Q309	J-6
Q310	G-4
Q311	E-4
Q313	E-3
Q314	E-10
Q315	D-6
Q318	E-10
Q321	I-11
Q323	B-11
Q324	C-11
Q325	C-11
Q333	D-5
Q338	D-5
Q340	G-5
Q341	G-5
Q342	D-4
Q343	D-5
Q344	D-4
Q390	E-11
Q391	E-11
Q392	F-11
Q393	E-10

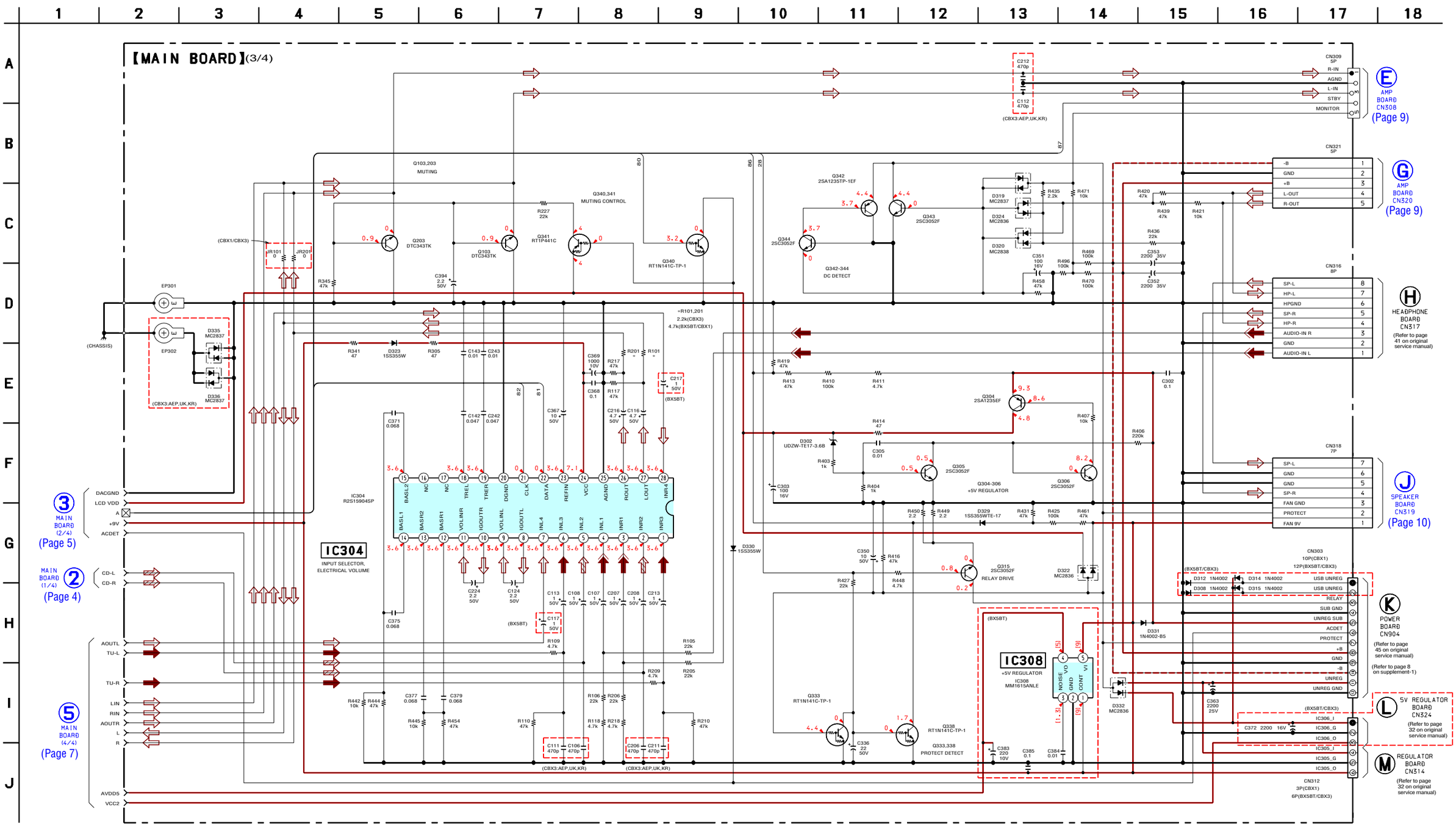
2-2. SCHEMATIC DIAGRAM – MAIN Section (1/4) –



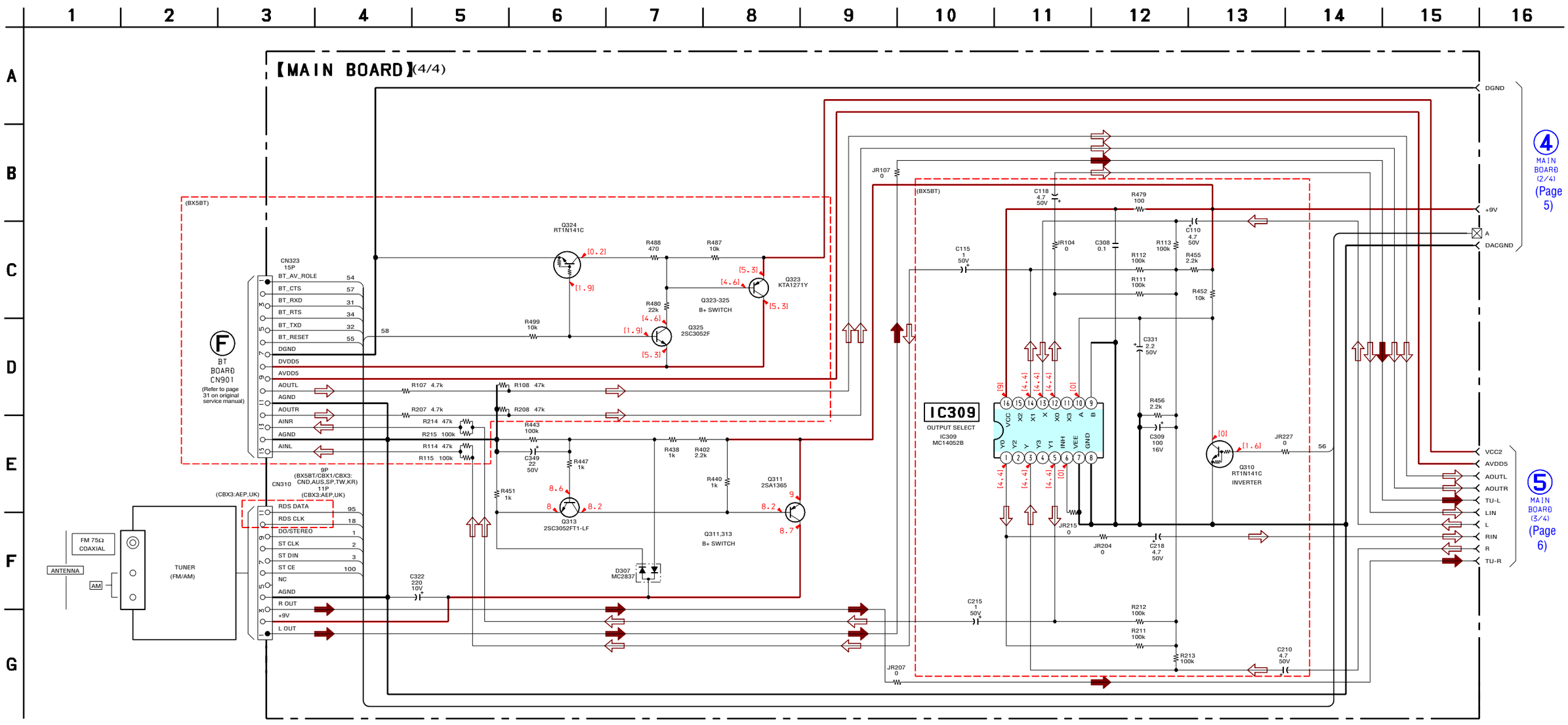
2-3. SCHEMATIC DIAGRAM – MAIN Section (2/4) –



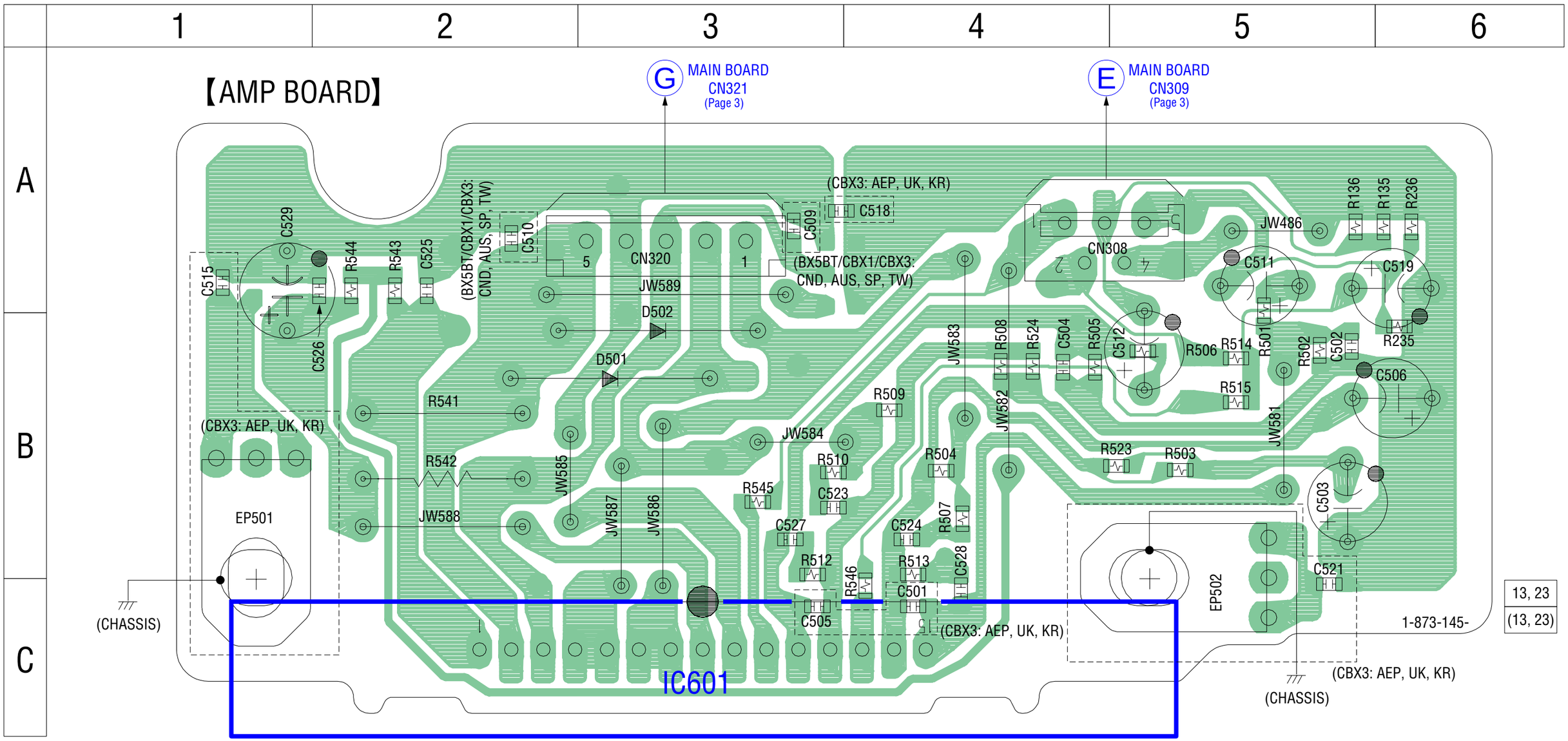
2-4. SCHEMATIC DIAGRAM – MAIN Section (3/4) –



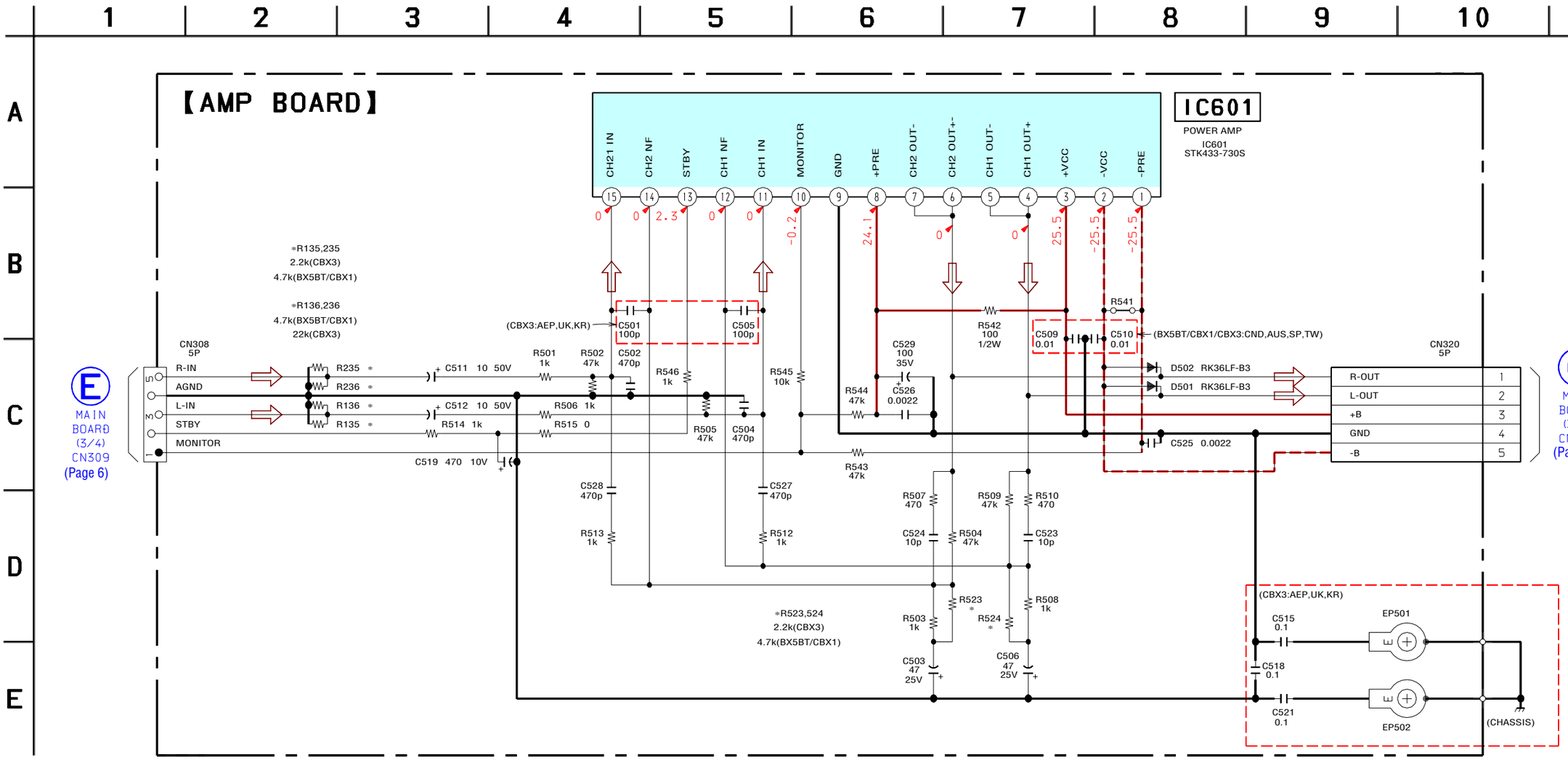
2-5. SCHEMATIC DIAGRAM – MAIN Section (4/4) –



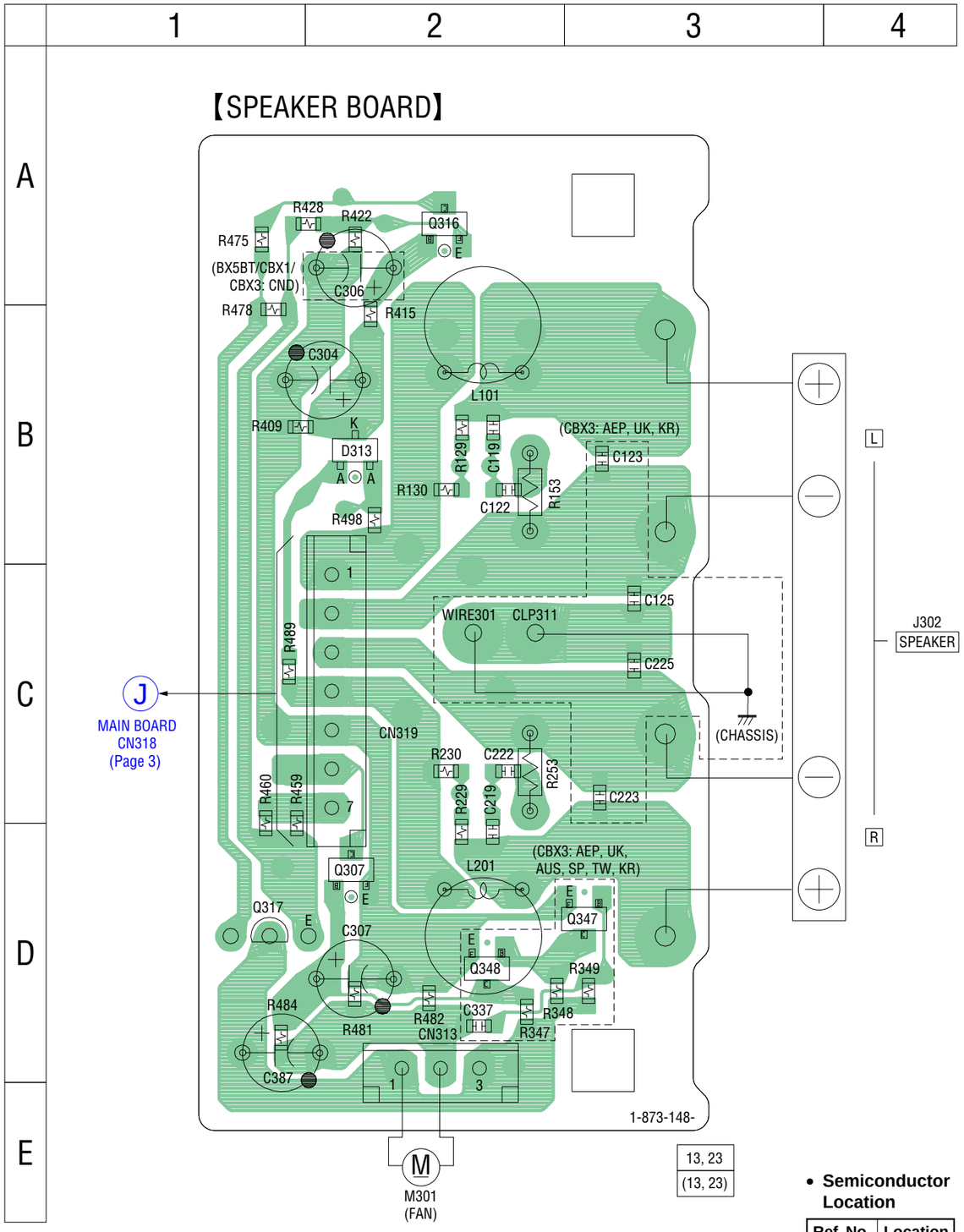
2-6. PRINTED WIRING BOARD – AMP Board –



2-7. SCHEMATIC DIAGRAM – AMP Board –



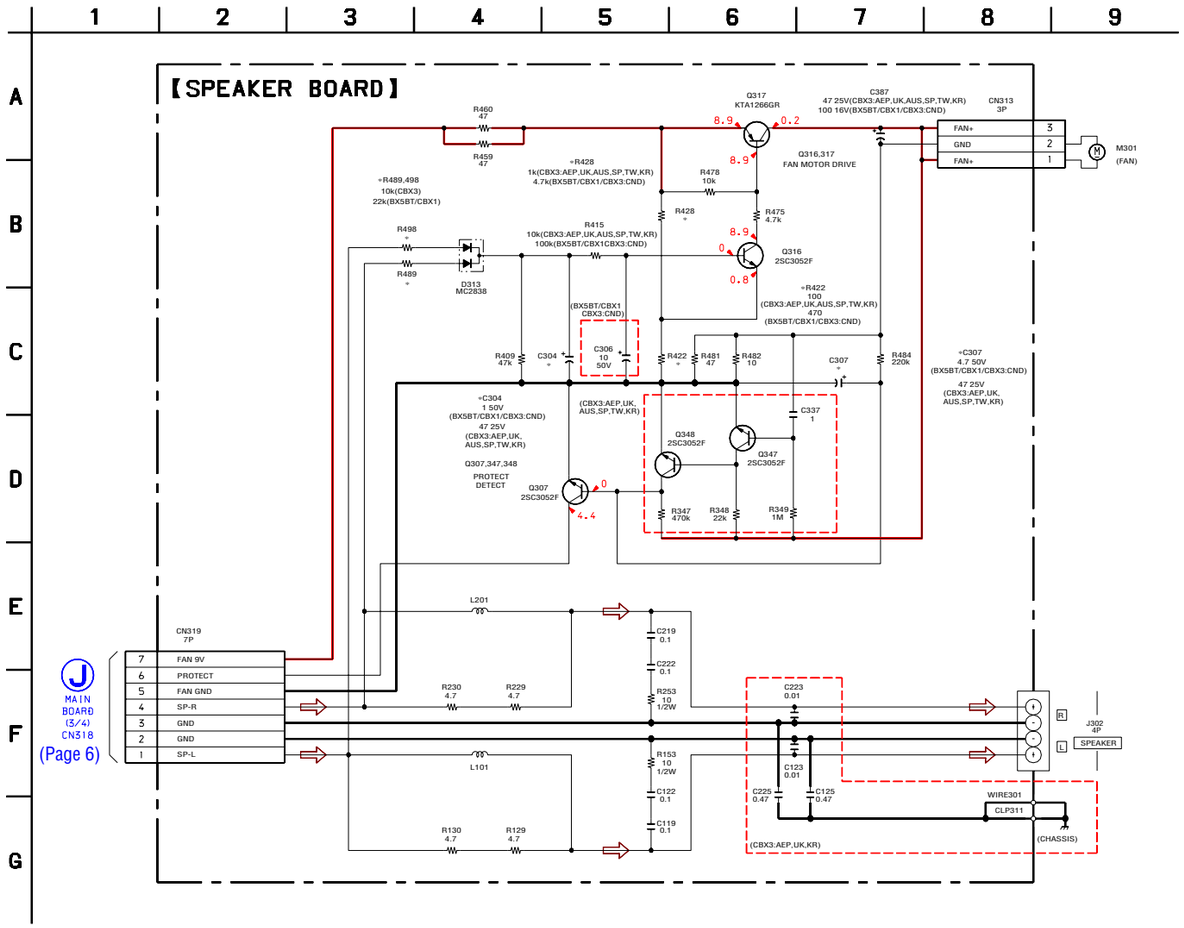
2-8. PRINTED WIRING BOARD – SPEAKER Board – : Uses unleaded solder.



- **Semiconductor Location**

Ref. No.	Location
D313	B-2
Q307	D-2
Q316	A-2
Q317	D-1
Q347	D-3
Q348	D-2

2-9. SCHEMATIC DIAGRAM – SPEAKER Board –



3. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...
- Abbreviation
  AUS : Australian model
  CND : Canadian model
  KR : Korean model
  SP : Singapore model
  TW : Taiwan model

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description				Remark
		AMP BOARD				
		*********				
		< CAPACITOR >				
C501	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
						(CBX3: AEP, UK, KR)
C502	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
C503	1-126-947-11	ELECT	47uF	20%	35V	
C504	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
C505	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
						(CBX3: AEP, UK, KR)
C506	1-126-947-11	ELECT	47uF	20%	35V	
C509	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
						(BX5BT/CBX1/CBX3: CND, AUS, SP, TW)
C510	1-162-974-11	CERAMIC CHIP	0.01uF		50V	
						(BX5BT/CBX1/CBX3: CND, AUS, SP, TW)
C511	1-126-964-11	ELECT	10uF	20%	50V	
C512	1-126-964-11	ELECT	10uF	20%	50V	
C515	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
						(CBX3: AEP, UK, KR)
C518	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
						(CBX3: AEP, UK, KR)
C519	1-126-935-11	ELECT	470uF	20%	16V	
C521	1-164-156-11	CERAMIC CHIP	0.1uF		25V	
						(CBX3: AEP, UK, KR)
C523	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	
C524	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	
C525	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C526	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C527	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
C528	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
C529	1-126-948-11	ELECT	100uF	20%	35V	
		< CONNECTOR >				
CN308	1-784-766-11	CONNECTOR, FFC 5P				
		< DIODE >				
D501	8-719-080-53	DIODE RK36LF-B3				
D502	8-719-080-53	DIODE RK36LF-B3				
		< EARTH TERMINAL >				
EP501	1-537-771-21	TERMINAL BOARD, GROUND				
						(CBX3: AEP, UK, KR)
EP502	1-537-771-21	TERMINAL BOARD, GROUND				
						(CBX3: AEP, UK, KR)
		< IC >				
IC601	6-710-800-01	IC STK433-730S-E				
		< RESISTOR >				
R135	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
						(CBX3)
R135	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
						(BX5BT/CBX1)
R136	1-216-837-11	METAL CHIP	22K	5%	1/10W	
						(CBX3)
R136	1-216-841-11	METAL CHIP	47K	5%	1/10W	
						(BX5BT/CBX1)
R235	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
						(CBX3)
R235	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
						(BX5BT/CBX1)
R236	1-216-837-11	METAL CHIP	22K	5%	1/10W	
						(CBX3)
R236	1-216-841-11	METAL CHIP	47K	5%	1/10W	
						(BX5BT/CBX1)
R501	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R502	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R503	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R504	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R505	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R506	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R507	1-216-817-11	METAL CHIP	470	5%	1/10W	
R508	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R509	1-216-841-11	METAL CHIP	47K	5%	1/10W	
R510	1-216-817-11	METAL CHIP	470	5%	1/10W	
R512	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R513	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R514	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R515	1-216-864-11	SHORT CHIP	0			
R523	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
						(CBX3)
R523	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
						(BX5BT/CBX1)
R524	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
						(CBX3)
R524	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
						(BX5BT/CBX1)

Ref. No.	Part No.	Description			Remark
R542	1-260-087-11	CARBON	100	5%	1/2W
R543	1-216-841-11	METAL CHIP	47K	5%	1/10W
R544	1-216-841-11	METAL CHIP	47K	5%	1/10W
R545	1-216-833-11	METAL CHIP	10K	5%	1/10W
R546	1-216-821-11	METAL CHIP	1K	5%	1/10W
**********					
	A-1236-003-A	MAIN BOARD, COMPLETE (CBX1)			
	A-1236-325-A	MAIN BOARD, COMPLETE (CBX3: AEP, UK)			
	A-1236-774-A	MAIN BOARD, COMPLETE (CBX3: CND)			
	A-1236-911-A	MAIN BOARD, COMPLETE (CBX3: SP)			
	A-1237-031-A	MAIN BOARD, COMPLETE (CBX3: KR)			
	A-1239-022-A	MAIN BOARD, COMPLETE (BX5BT)			
	A-1267-278-A	MAIN BOARD, COMPLETE (CBX3: AUS, TW)			
		**********			
		< CAPACITOR >			
C106	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3: AEP, UK, KR)
C107	1-126-960-11	ELECT	1uF	20%	50V
C108	1-126-960-11	ELECT	1uF	20%	50V
C110	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT)
C111	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3: AEP, UK, KR)
C112	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3: AEP, UK, KR)
C113	1-126-960-11	ELECT	1uF	20%	50V
C115	1-126-960-11	ELECT	1uF	20%	50V (BX5BT)
C116	1-126-963-11	ELECT	4.7uF	20%	50V
C117	1-126-960-11	ELECT	1uF	20%	50V (BX5BT)
C118	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT)
C124	1-126-961-11	ELECT	2.2uF	20%	50V
C142	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C143	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C206	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3: AEP, UK, KR)
C207	1-126-960-11	ELECT	1uF	20%	50V
C208	1-126-960-11	ELECT	1uF	20%	50V
C210	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT)
C211	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3: AEP, UK, KR)
C212	1-162-962-11	CERAMIC CHIP	470PF	10%	50V (CBX3: AEP, UK, KR)
C213	1-126-960-11	ELECT	1uF	20%	50V
C215	1-126-960-11	ELECT	1uF	20%	50V (BX5BT)
C216	1-126-963-11	ELECT	4.7uF	20%	50V
C217	1-126-960-11	ELECT	1uF	20%	50V (BX5BT)
C218	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT)
C224	1-126-961-11	ELECT	2.2uF	20%	50V
C242	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C243	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C301	1-124-259-11	ELECT	4.7uF	20%	50V
C302	1-164-156-11	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description			Remark
C303	1-126-933-11	ELECT	100uF	20%	16V
C305	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C308	1-164-156-11	CERAMIC CHIP	0.1uF		25V (BX5BT)
C309	1-126-933-11	ELECT	100uF	20%	16V (BX5BT)
C310	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C311	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C316	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C319	1-126-934-11	ELECT	220uF	20%	16V
C320	1-216-845-11	METAL CHIP	100K	5%	1/10W (CBX3)
C322	1-126-934-11	ELECT	220uF	20%	16V
C324	1-104-665-11	ELECT	100uF	20%	25V
C330	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C331	1-126-961-11	ELECT	2.2uF	20%	50V (BX5BT)
C333	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C336	1-126-965-11	ELECT	22uF	20%	50V
C338	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C339	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C340	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C341	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C342	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C344	1-126-916-11	ELECT	1000uF	20%	6.3V
C346	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C347	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C348	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C349	1-126-965-11	ELECT	22uF	20%	50V
C350	1-126-964-11	ELECT	10uF	20%	50V
C351	1-126-933-11	ELECT	100uF	20%	16V
C352	1-126-953-11	ELECT	2200uF	20%	35V
C353	1-126-953-11	ELECT	2200uF	20%	35V
C354	1-164-156-11	CERAMIC CHIP	0.1uF		25V (CBX3)
C355	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C356	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (CBX3)
C361	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C362	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C363	1-126-943-11	ELECT	2200uF	20%	25V
C364	1-124-261-00	ELECT	10uF	20%	50V
C366	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C367	1-126-964-11	ELECT	10uF	20%	50V
C368	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C369	1-126-926-11	ELECT	1000uF	20%	10V
C371	1-130-493-00	MYLAR	0.068uF	5%	50V
C372	1-126-768-11	ELECT	2200uF	20%	16V (BX5BT/CBX3)
C375	1-130-493-00	MYLAR	0.068uF	5%	50V
C377	1-130-493-00	MYLAR	0.068uF	5%	50V
C379	1-130-493-00	MYLAR	0.068uF	5%	50V
C383	1-126-934-11	ELECT	220uF	20%	16V (BX5BT)
C384	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V (BX5BT)

Ref. No.	Part No.	Description			Remark
C385	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (BX5BT)
C386	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C391	1-126-935-11	ELECT	470uF	20%	16V
C392	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C393	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C394	1-126-961-11	ELECT	2.2uF	20%	50V
		< CONNECTOR >			
CN303	1-819-138-11	PIN, CONNECTOR 10P (CBX1)			
CN303	1-819-140-11	PIN, CONNECTOR 12P (BX5BT/CBX3)			
CN304	1-779-287-11	CONNECTOR, FFC (LIF (NON-ZIF)) 19P (CBX3)			
CN305	1-779-289-11	CONNECTOR, FFC (LIF (NON-ZIF)) 21P (BX5BT/CBX1)			
CN305	1-779-293-11	CONNECTOR, FFC (LIF (NON-ZIF)) 25P (CBX3)			
CN306	1-784-774-11	CONNECTOR, FFC 13P			
CN309	1-784-766-11	CONNECTOR, FFC 5P			
CN310	1-568-828-11	CONNECTOR, FFC 9P (BX5BT/CBX1/CBX3: CND, AUS, SP, TW, KR)			
CN310	1-568-830-11	CONNECTOR, FFC 11P (CBX3: AEP, UK)			
CN311	1-779-273-11	CONNECTOR, FFC (LIF (NON-ZIF)) 5P			
CN312	1-819-131-11	PIN, CONNECTOR 3P (CBX1)			
CN312	1-819-134-11	PIN, CONNECTOR 6P (BX5BT/CBX3)			
CN316	1-819-136-11	PIN, CONNECTOR 8P			
CN318	1-819-135-11	PIN, CONNECTOR 7P			
CN321	1-819-133-11	PIN, CONNECTOR			
CN322	1-815-445-11	PIN, CONNECTOR (PWB) 4P			
CN323	1-779-283-11	CONNECTOR, FFC (LIF (NON-ZIF)) 15P (BX5BT)			
		< DIODE >			
D302	6-501-163-01	DIODE UDZW-TE17-3.6B			
D303	6-500-334-01	DIODE MC2836-T112-1			
D304	6-501-164-01	DIODE UDZW-TE17-3.9B			
D306	6-501-193-01	DIODE 1SS355WTE-17 (CBX3)			
D307	6-501-579-01	DIODE MC2837			
D308	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)			
D309	6-501-193-01	DIODE 1SS355WTE-17			
D310	6-501-193-01	DIODE 1SS355WTE-17			
D311	6-501-193-01	DIODE 1SS355WTE-17			
D312	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)			
D314	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)			
D315	6-501-582-01	DIODE 1N4002-B5 (BX5BT/CBX3)			
D318	6-501-582-01	DIODE 1N4002-B5			
D319	6-501-579-01	DIODE MC2837			
D320	6-500-335-01	DIODE MC2838-T112-1			
D321	6-501-582-01	DIODE 1N4002-B5			
D322	6-500-334-01	DIODE MC2836-T112-1			
D323	6-501-193-01	DIODE 1SS355WTE-17			
D324	6-500-334-01	DIODE MC2836-T112-1			
D329	6-501-193-01	DIODE 1SS355WTE-17			
D330	6-501-193-01	DIODE 1SS355WTE-17			
D331	6-501-582-01	DIODE 1N4002-B5			
D332	6-500-334-01	DIODE MC2836-T112-1			
D335	6-501-579-01	DIODE MC2837 (CBX3: AEP, UK, KR)			
D336	6-501-579-01	DIODE MC2837 (CBX3: AEP, UK, KR)			
		< EARTH TERMINAL >			
EP301	1-537-771-21	TERMINAL BOARD, GROUND			
EP302	1-537-771-21	TERMINAL BOARD, GROUND (CBX3: AEP, UK, KR)			
		< IC >			
IC301	6-807-532-01	IC M3062LFGPFP-704 (BX5BT)			
IC301	6-807-533-01	IC M3062LFGPFP-700 (CBX1)			
IC301	6-807-534-01	IC M3062LFGPFP-701 (CBX3)			
IC304	6-710-289-01	IC R2S15904SP			
IC308	6-707-282-01	IC MM1615ANLE (BX5BT)			
IC309	8-759-430-37	IC MC14052BDTR2 (BX5BT)			
IC310	6-701-680-01	IC PST3629NR			
IC311	8-759-598-69	IC BA6956AN			
IC321	8-759-523-03	IC TC74HC4066AFT (EL) (CBX3)			
IC322	8-759-523-03	IC TC74HC4066AFT (EL) (CBX3)			
IC323	6-707-870-01	IC TC74VHC157FT (EKJ) (CBX3)			
		< JUMPER RESISTOR >			
JR101	1-216-864-11	SHORT CHIP	0 (CBX1/CBX3)		
JR104	1-216-864-11	SHORT CHIP	0 (BX5BT)		
JR107	1-216-296-11	SHORT CHIP	0		
JR201	1-216-864-11	SHORT CHIP	0 (CBX1/CBX3)		
JR204	1-216-864-11	SHORT CHIP	0 (BX5BT)		
JR207	1-216-864-11	SHORT CHIP	0		
JR211	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
JR212	1-216-864-11	SHORT CHIP	0		
JR213	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
JR214	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
JR215	1-216-864-11	SHORT CHIP	0 (BX5BT)		
JR219	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
JR221	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
JR222	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
JR223	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1)		
JR227	1-216-864-11	SHORT CHIP	0 (BX5BT)		
JR301	1-216-296-11	SHORT CHIP	0		
JR302	1-216-864-11	SHORT CHIP	0		
JR303	1-216-864-11	SHORT CHIP	0 (CBX3)		
JR304	1-216-864-11	SHORT CHIP	0		
JR305	1-216-296-11	SHORT CHIP	0		
JR421	1-216-296-11	SHORT CHIP	0		
JR422	1-216-864-11	SHORT CHIP	0		
JR469	1-216-296-11	SHORT CHIP	0		
JR470	1-216-296-11	SHORT CHIP	0		
JR472	1-216-296-11	SHORT CHIP	0		
JR474	1-216-864-11	SHORT CHIP	0		
JR475	1-216-864-11	SHORT CHIP	0		
JR476	1-216-864-11	SHORT CHIP	0		
JR478	1-216-864-11	SHORT CHIP	0 (CBX3)		
JR479	1-216-864-11	SHORT CHIP	0 (CBX3)		
JR480	1-216-296-11	SHORT CHIP	0 (CBX3)		
JR481	1-216-296-11	SHORT CHIP	0 (CBX3)		
JR482	1-216-864-11	SHORT CHIP	0		
JR483	1-216-864-11	SHORT CHIP	0		
JR484	1-216-864-11	SHORT CHIP	0		
JR485	1-216-864-11	SHORT CHIP	0		
JR486	1-216-296-11	SHORT CHIP	0 (CBX3)		
JR489	1-216-296-11	SHORT CHIP	0		
JR490	1-216-864-11	SHORT CHIP	0		

MAIN

Ref. No.	Part No.	Description			Remark
JR491	1-216-864-11	SHORT CHIP	0		
JR492	1-216-296-11	SHORT CHIP	0		
JR493	1-216-296-11	SHORT CHIP	0 (CBX3)		
JR494	1-216-864-11	SHORT CHIP	0		
JR495	1-216-296-11	SHORT CHIP	0		
JR497	1-216-296-11	SHORT CHIP	0 (BX5BT)		
JR498	1-216-296-11	SHORT CHIP	0 (BX5BT)		
JR500	1-216-296-11	SHORT CHIP	0		
JR505	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L302	1-410-501-11	INDUCTOR	2.2uH		
		< TRANSISTOR >			
Q103	8-729-920-31	TRANSISTOR	DTC343TK		
Q203	8-729-920-31	TRANSISTOR	DTC343TK		
Q301	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q302	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q303	8-729-027-38	TRANSISTOR	DTA144EKA-T146		
Q304	8-729-600-22	TRANSISTOR	2SA1235-F		
Q305	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q306	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q309	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q310	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (BX5BT)		
Q311	8-729-024-43	TRANSISTOR	2SA1365-T112-1EF		
Q313	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q314	8-729-027-38	TRANSISTOR	DTA144EKA-T146 (CBX3)		
Q315	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q318	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (CBX3)		
Q321	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (CBX3)		
Q323	8-729-037-13	TRANSISTOR	KTA1271Y (BX5BT)		
Q324	8-729-027-43	TRANSISTOR	DTC114EKA-T146 (BX5BT)		
Q325	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (BX5BT)		
Q333	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q338	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q340	8-729-027-43	TRANSISTOR	DTC114EKA-T146		
Q341	8-729-027-38	TRANSISTOR	DTA144EKA-T146		
Q342	8-729-600-22	TRANSISTOR	2SA1235-F		
Q343	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q344	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q390	8-729-028-54	TRANSISTOR	KTC3205		
Q391	8-729-036-86	TRANSISTOR	KTC3203Y-AT (CBX3)		
Q392	8-729-036-86	TRANSISTOR	KTC3203Y-AT		
Q393	8-729-600-22	TRANSISTOR	2SA1235-F		
		< RESISTOR >			
R101	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (CBX3)
R101	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R102	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R103	1-216-841-11	METAL CHIP	47K	5%	1/10W
R105	1-216-837-11	METAL CHIP	22K	5%	1/10W
R106	1-216-837-11	METAL CHIP	22K	5%	1/10W
R107	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT)
R108	1-216-841-11	METAL CHIP	47K	5%	1/10W (BX5BT)
R109	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R110	1-216-841-11	METAL CHIP	47K	5%	1/10W
R111	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R112	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R113	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R114	1-216-841-11	METAL CHIP	47K	5%	1/10W (BX5BT)
R115	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R117	1-216-841-11	METAL CHIP	47K	5%	1/10W
R118	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R201	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (CBX3)
R201	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1)
R202	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R203	1-216-841-11	METAL CHIP	47K	5%	1/10W
R205	1-216-837-11	METAL CHIP	22K	5%	1/10W
R206	1-216-837-11	METAL CHIP	22K	5%	1/10W
R207	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT)
R208	1-216-841-11	METAL CHIP	47K	5%	1/10W (BX5BT)
R209	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R210	1-216-841-11	METAL CHIP	47K	5%	1/10W
R211	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R212	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R213	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R214	1-216-841-11	METAL CHIP	47K	5%	1/10W (BX5BT)
R215	1-216-845-11	METAL CHIP	100K	5%	1/10W (BX5BT)
R217	1-216-841-11	METAL CHIP	47K	5%	1/10W
R218	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R227	1-216-837-11	METAL CHIP	22K	5%	1/10W
R300	1-216-809-11	METAL CHIP	100	5%	1/10W
R301	1-216-809-11	METAL CHIP	100	5%	1/10W
R302	1-216-809-11	METAL CHIP	100	5%	1/10W
R303	1-216-809-11	METAL CHIP	100	5%	1/10W
R304	1-216-809-11	METAL CHIP	100	5%	1/10W
R305	1-216-805-11	METAL CHIP	47	5%	1/10W
R306	1-216-837-11	METAL CHIP	22K	5%	1/10W
R307	1-216-821-11	METAL CHIP	1K	5%	1/10W
R308	1-249-401-11	CARBON	47	5%	1/4W
R309	1-216-833-11	METAL CHIP	10K	5%	1/10W
R310	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R311	1-216-849-11	METAL CHIP	220K	5%	1/10W
R312	1-249-401-11	CARBON	47	5%	1/4W
R313	1-216-864-11	SHORT CHIP	0		
R314	1-249-401-11	CARBON	47	5%	1/4W
R315	1-216-845-11	METAL CHIP	100K	5%	1/10W
R316	1-216-864-11	SHORT CHIP	0		
R317	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R318	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3: AEP, UK)
R319	1-216-809-11	METAL CHIP	100	5%	1/10W
R320	1-216-841-11	METAL CHIP	47K	5%	1/10W
R321	1-216-841-11	METAL CHIP	47K	5%	1/10W
R322	1-216-809-11	METAL CHIP	100	5%	1/10W
R325	1-216-809-11	METAL CHIP	100	5%	1/10W
R326	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT/CBX3)
R327	1-216-809-11	METAL CHIP	100	5%	1/10W
R328	1-216-809-11	METAL CHIP	100	5%	1/10W
R329	1-216-809-11	METAL CHIP	100	5%	1/10W
R330	1-216-809-11	METAL CHIP	100	5%	1/10W
R331	1-216-809-11	METAL CHIP	100	5%	1/10W
R332	1-216-809-11	METAL CHIP	100	5%	1/10W
R333	1-216-809-11	METAL CHIP	100	5%	1/10W
R334	1-216-809-11	METAL CHIP	100	5%	1/10W
R335	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R336	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R337	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R338	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R339	1-216-833-11	METAL CHIP	10K	5%	1/10W (CBX3)
R340	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R341	1-216-805-11	METAL CHIP	47	5%	1/10W
R344	1-216-809-11	METAL CHIP	100	5%	1/10W
R345	1-216-841-11	METAL CHIP	47K	5%	1/10W
R354	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R355	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R357	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R358	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R365	1-216-809-11	METAL CHIP	100	5%	1/10W
R366	1-216-809-11	METAL CHIP	100	5%	1/10W
R367	1-216-809-11	METAL CHIP	100	5%	1/10W
R368	1-216-809-11	METAL CHIP	100	5%	1/10W
R369	1-216-809-11	METAL CHIP	100	5%	1/10W
R370	1-216-809-11	METAL CHIP	100	5%	1/10W
R371	1-216-809-11	METAL CHIP	100	5%	1/10W
R372	1-216-809-11	METAL CHIP	100	5%	1/10W
R375	1-216-809-11	METAL CHIP	100	5%	1/10W
R376	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R381	1-216-821-11	METAL CHIP	1K	5%	1/10W
R382	1-216-821-11	METAL CHIP	1K	5%	1/10W
R385	1-216-864-11	SHORT CHIP	0 (CBX1/CBX3)		
R386	1-216-849-11	METAL CHIP	220K	5%	1/10W
R387	1-216-809-11	METAL CHIP	100	5%	1/10W
R388	1-216-809-11	METAL CHIP	100	5%	1/10W
R389	1-216-809-11	METAL CHIP	100	5%	1/10W
R390	1-216-809-11	METAL CHIP	100	5%	1/10W
R391	1-216-809-11	METAL CHIP	100	5%	1/10W
R392	1-216-809-11	METAL CHIP	100	5%	1/10W
R393	1-216-809-11	METAL CHIP	100	5%	1/10W
R394	1-216-813-11	METAL CHIP	220	5%	1/10W
R395	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3: AEP, UK)
R397	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (BX5BT/CBX1/CBX3: CND)
R397	1-216-864-11	SHORT CHIP	0 (CBX3: AUS, SP, TW, KR)		
R402	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R403	1-216-821-11	METAL CHIP	1K	5%	1/10W
R404	1-216-821-11	METAL CHIP	1K	5%	1/10W
R406	1-216-849-11	METAL CHIP	220K	5%	1/10W
R407	1-216-833-11	METAL CHIP	10K	5%	1/10W
R408	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R410	1-216-845-11	METAL CHIP	100K	5%	1/10W
R411	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R413	1-216-841-11	METAL CHIP	47K	5%	1/10W
R414	1-216-805-11	METAL CHIP	47	5%	1/10W
R416	1-216-841-11	METAL CHIP	47K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-864-11	SHORT CHIP	0 (BX5BT/CBX1CBX3: CND, AUS, SP, TW, KR)		
R419	1-216-841-11	METAL CHIP	47K	5%	1/10W
R420	1-216-841-11	METAL CHIP	47K	5%	1/10W
R421	1-216-833-11	METAL CHIP	10K	5%	1/10W
R423	1-216-809-11	METAL CHIP	100	5%	1/10W (CBX3)
R425	1-216-845-11	METAL CHIP	100K	5%	1/10W
R426	1-216-833-11	METAL CHIP	10K	5%	1/10W
R427	1-216-837-11	METAL CHIP	22K	5%	1/10W
R429	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R430	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R431	1-216-841-11	METAL CHIP	47K	5%	1/10W
R432	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX1/CBX3)
R433	1-216-833-11	METAL CHIP	10K	5%	1/10W
R434	1-216-833-11	METAL CHIP	10K	5%	1/10W
R435	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R436	1-216-837-11	METAL CHIP	22K	5%	1/10W
R438	1-216-821-11	METAL CHIP	1K	5%	1/10W
R439	1-216-841-11	METAL CHIP	47K	5%	1/10W
R440	1-216-821-11	METAL CHIP	1K	5%	1/10W
R441	1-216-833-11	METAL CHIP	10K	5%	1/10W
R442	1-216-833-11	METAL CHIP	10K	5%	1/10W
R443	1-216-845-11	METAL CHIP	100K	5%	1/10W
R444	1-216-841-11	METAL CHIP	47K	5%	1/10W
R445	1-216-833-11	METAL CHIP	10K	5%	1/10W
R446	1-216-833-11	METAL CHIP	10K	5%	1/10W
R447	1-216-821-11	METAL CHIP	1K	5%	1/10W
R448	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R449	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R450	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R451	1-216-821-11	METAL CHIP	1K	5%	1/10W
R452	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R454	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R455	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (BX5BT)
R456	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (BX5BT)
R457	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX1/CBX3)
R458	1-216-841-11	METAL CHIP	47K	5%	1/10W
R461	1-216-841-11	METAL CHIP	47K	5%	1/10W
R462	1-216-821-11	METAL CHIP	1K	5%	1/10W
R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R464	1-216-833-11	METAL CHIP	10K	5%	1/10W
R465	1-216-841-11	METAL CHIP	47K	5%	1/10W
R466	1-216-841-11	METAL CHIP	47K	5%	1/10W
R467	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R468	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R469	1-216-845-11	METAL CHIP	100K	5%	1/10W
R470	1-216-845-11	METAL CHIP	100K	5%	1/10W
R471	1-216-833-11	METAL CHIP	10K	5%	1/10W
R472	1-216-821-11	METAL CHIP	1K	5%	1/10W
R473	1-216-857-11	METAL CHIP	1M	5%	1/10W
R474	1-216-857-11	METAL CHIP	1M	5%	1/10W
R477	1-216-821-11	METAL CHIP	1K	5%	1/10W
R479	1-216-809-11	METAL CHIP	100	5%	1/10W (BX5BT)
R480	1-216-837-11	METAL CHIP	22K	5%	1/10W (BX5BT)
R485	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R486	1-216-845-11	METAL CHIP	100K	5%	1/10W
R487	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
R488	1-216-817-11	METAL CHIP	470	5%	1/10W (BX5BT)
R490	1-216-833-11	METAL CHIP	10K	5%	1/10W
R491	1-216-833-11	METAL CHIP	10K	5%	1/10W
R492	1-216-833-11	METAL CHIP	10K	5%	1/10W
R493	1-216-833-11	METAL CHIP	10K	5%	1/10W
R494	1-216-833-11	METAL CHIP	10K	5%	1/10W
R495	1-216-864-11	SHORT CHIP	0		(BX5BT/CBX1/CBX3: CND, AUS, SP, TW, KR)
R496	1-216-845-11	METAL CHIP	100K	5%	1/10W
R497	1-216-821-11	METAL CHIP	1K	5%	1/10W (BX5BT/CBX1/CBX3: CND)
R497	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (CBX3: AEP, UK)
R499	1-216-833-11	METAL CHIP	10K	5%	1/10W (BX5BT)
		< VIBRATOR >			
X301	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			
X302	1-760-489-11	VIBRATOR, CERAMIC (5MHz)			

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SPEAKER BOARD

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< CAPACITOR >

C119	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C122	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C123	1-162-974-11	CERAMIC CHIP	0.01uF		50V (CBX3: AEP, UK, KR)
C125	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V (CBX3: AEP, UK, KR)
C219	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C222	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C223	1-162-974-11	CERAMIC CHIP	0.01uF		50V (CBX3: AEP, UK, KR)
C225	1-117-863-11	CERAMIC CHIP	0.47uF	10%	6.3V (CBX3: AEP, UK, KR)
C304	1-126-947-11	ELECT	47uF	20%	35V (CBX3: AEP, UK, AUS, SP, TW, KR)
C304	1-126-960-11	ELECT	1uF	20%	50V (BX5BT/CBX1/CBX3: CND)
C306	1-126-964-11	ELECT	10uF	20%	50V (BX5BT/CBX1/CBX3: CND)
C307	1-126-947-11	ELECT	47uF	20%	35V (CBX3: AEP, UK, AUS, SP, TW, KR)
C307	1-126-963-11	ELECT	4.7uF	20%	50V (BX5BT/CBX1/CBX3: CND)
C337	1-165-908-11	CERAMIC CHIP	1uF	10%	10V (CBX3: AEP, UK, AUS, SP, TW, KR)
C387	1-126-933-11	ELECT	100uF	20%	16V (BX5BT/CBX1/CBX3: CND)
C387	1-126-947-11	ELECT	47uF	20%	35V (CBX3: AEP, UK, AUS, SP, TW, KR)
		< CONNECTOR >			
CN313	1-819-131-11	PIN, CONNECTOR 3P			
		< DIODE >			
D313	6-500-335-01	DIODE MC2838-T112-1			
		< TERMINAL BOARD >			
J302	1-780-275-11	TERMINAL BOARD, PUSH (4P) (SPEAKER)			
		< COIL >			
L101	1-422-009-13	COIL, AIR-CORE			
L201	1-422-009-13	COIL, AIR-CORE			
		< TRANSISTOR >			
Q307	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q316	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q317	8-729-037-03	TRANSISTOR	KTA1266GR-AT		
Q347	8-729-120-28	TRANSISTOR	2SC1623-L5L6		(CBX3: AEP, UK, AUS, SP, TW, KR)
Q348	8-729-120-28	TRANSISTOR	2SC1623-L5L6		(CBX3: AEP, UK, AUS, SP, TW, KR)
		< RESISTOR >			
R129	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R130	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R153	1-260-304-51	CARBON	10	5%	1/2W
R229	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R230	1-216-793-11	METAL CHIP	4.7	5%	1/10W
R253	1-260-304-51	CARBON	10	5%	1/2W
R347	1-216-853-11	METAL CHIP	470K	5%	1/10W (CBX3: AEP, UK, AUS, SP, TW, KR)
R348	1-216-837-11	METAL CHIP	22K	5%	1/10W (CBX3: AEP, UK, AUS, SP, TW, KR)

Ref. No.	Part No.	Description			Remark
R349	1-216-857-11	METAL CHIP	1M	5%	1/10W
			(CBX3: AEP, UK, AUS, SP, TW, KR)		
R409	1-216-841-11	METAL CHIP	47K	5%	1/10W
R415	1-216-833-11	METAL CHIP	10K	5%	1/10W
			(CBX3: AEP, UK, AUS, SP, TW, KR)		
R415	1-216-845-11	METAL CHIP	100K	5%	1/10W
			(BX5BT/CBX1/CBX3: CND)		
R422	1-216-809-11	METAL CHIP	100	5%	1/10W
			(CBX3: AEP, UK, AUS, SP, TW, KR)		
R422	1-216-817-11	METAL CHIP	470	5%	1/10W
			(BX5BT/CBX1/CBX3: CND)		
R428	1-216-821-11	METAL CHIP	1K	5%	1/10W
			(CBX3: AEP, UK, AUS, SP, TW, KR)		
R428	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
			(BX5BT/CBX1/CBX3: CND)		
R459	1-216-805-11	METAL CHIP	47	5%	1/10W
R460	1-216-805-11	METAL CHIP	47	5%	1/10W
R475	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R478	1-216-833-11	METAL CHIP	10K	5%	1/10W
R481	1-216-805-11	METAL CHIP	47	5%	1/10W
R482	1-216-797-11	METAL CHIP	10	5%	1/10W
R484	1-216-849-11	METAL CHIP	220K	5%	1/10W
R489	1-216-833-11	METAL CHIP	10K	5%	1/10W
					(CBX3)
R489	1-216-837-11	METAL CHIP	22K	5%	1/10W
					(BX5BT/CBX1)
R498	1-216-833-11	METAL CHIP	10K	5%	1/10W
					(CBX3)
R498	1-216-837-11	METAL CHIP	22K	5%	1/10W
					(BX5BT/CBX1)

MEMO

HCD-BX5BT/CBX1/CBX3

SONY

SERVICE MANUAL

Ver. 1.3 2007.06

US Model
HCD-BX5BT/CBX1
Canadian Model
AEP Model
UK Model
E Model
Australian Model
HCD-CBX3

SUPPLEMENT-3

File this supplement with the service manual.

Subject: Addition of POWER board
(Suffix-23: for Singapore model)
Addition of VOLTAGE SELECTOR board
(Sigapore model only)

POWER board of suffix-23 is added for CBX3: Singapore model.
VOLTAGE SELECTOR board is added for CBX3: Singapore model only.
Printed wiring boards and schematic diagrams and electrical parts list are described in this supplement-3.
Refer to original service manual, supplement-1 and supplement-2 for other information.

9-887-614-83

1. DIAGRAMS

- **Note for Printed Wiring Boards and Schematic Diagrams**

Note on Printed Wiring Board:
- ⊶——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ▬ : Pattern from the side which enables seeing.

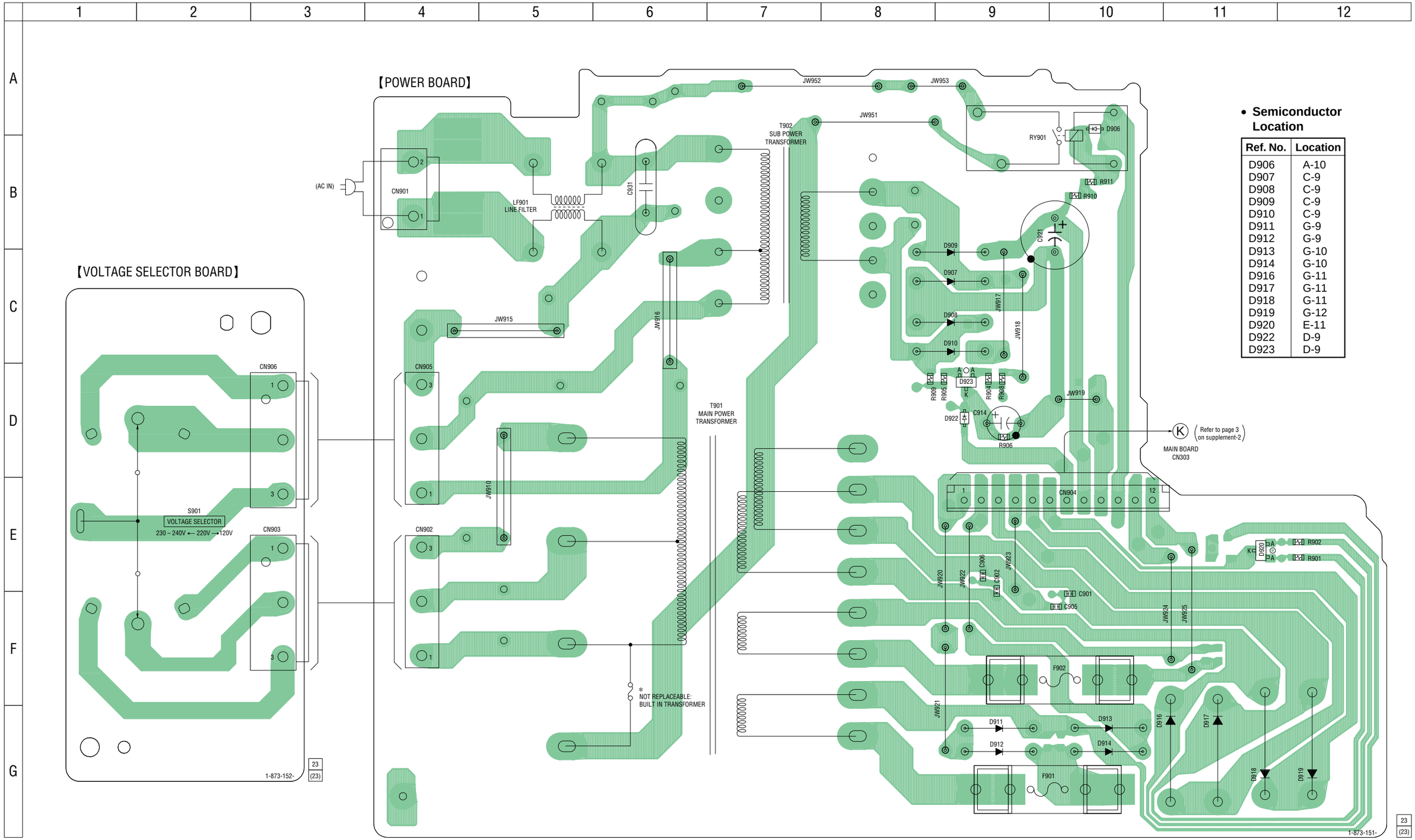
(The other layers' patterns are not indicated.)

Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.

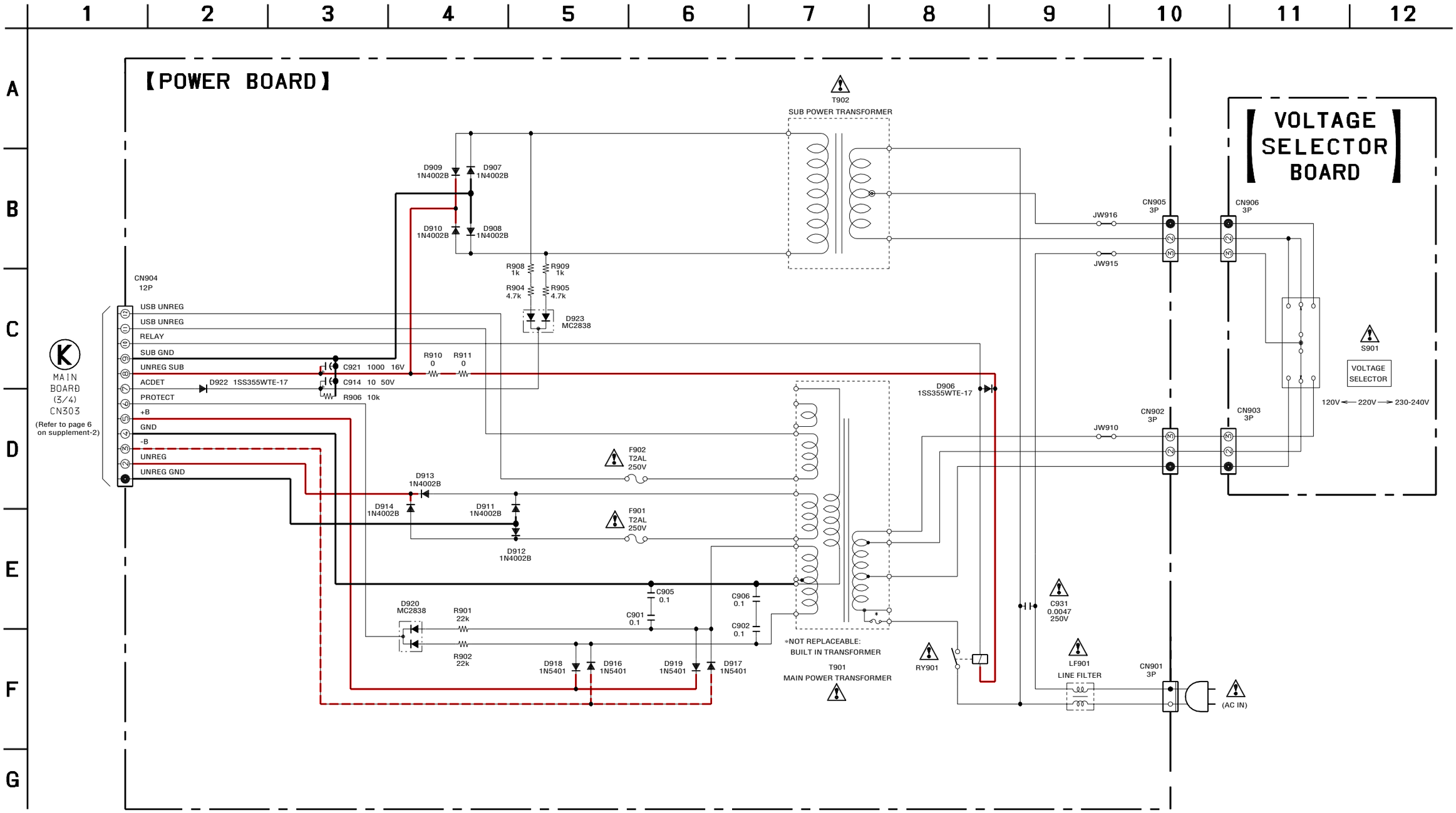
1-1. PRINTED WIRING BOARD – POWER Section (CBX3: Singapore model) – : Uses unleaded solder.



- **Semiconductor Location**

Ref. No.	Location
D906	A-10
D907	C-9
D908	C-9
D909	C-9
D910	C-9
D911	G-9
D912	G-9
D913	G-10
D914	G-10
D916	G-11
D917	G-11
D918	G-11
D919	G-12
D920	E-11
D922	D-9
D923	D-9

1-2. SCHEMATIC DIAGRAM – POWER Section (CBX3: Singapore model) –



POWER **VOLTAGE SELECTOR**

2. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		POWER BOARD (CBX3: Singapore)			
		**********			
		< CAPACITOR >			
C901	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C902	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C905	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C906	1-165-621-11	CERAMIC CHIP	0.1uF		50V
C914	1-126-964-11	ELECT	10uF	20%	50V
C921	1-126-767-11	ELECT	1000uF	20%	16V
⚠C931	1-113-924-11	CERAMIC	0.0047uF	20%	250V
		< CONNECTOR >			
* CN901	1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN902	1-564-687-11	PIN, CONNECTOR (3.96mm PITCH) 3P			
CN905	1-564-687-21	PIN, CONNECTOR (3.96mm PITCH) 3PR			
		< DIODE >			
D906	6-501-193-01	DIODE 1SS355WTE-17			
D907	6-501-582-01	DIODE 1N4002-B5			
D908	6-501-582-01	DIODE 1N4002-B5			
D909	6-501-582-01	DIODE 1N4002-B5			
D910	6-501-582-01	DIODE 1N4002-B5			
D911	6-501-582-01	DIODE 1N4002-B5			
D912	6-501-582-01	DIODE 1N4002-B5			
D913	6-501-582-01	DIODE 1N4002-B5			
D914	6-501-582-01	DIODE 1N4002-B5			
D916	6-501-569-01	DIODE 1N5401-C352			
D917	6-501-569-01	DIODE 1N5401-C352			
D918	6-501-569-01	DIODE 1N5401-C352			
D919	6-501-569-01	DIODE 1N5401-C352			
D920	6-500-335-01	DIODE MC2838-T112-1			
D922	6-501-193-01	DIODE 1SS355WTE-17			
D923	6-500-335-01	DIODE MC2838-T112-1			
		< FUSE HOLDER >			
FH901	1-533-233-31	FUSE HOLDER			
FH902	1-533-233-31	FUSE HOLDER			
FH903	1-533-233-31	FUSE HOLDER			
FH904	1-533-233-31	FUSE HOLDER			
		< LINE FILTER >			
⚠LF901	1-443-993-11	TRANSFORMER, LINE FILTER (LFT)			

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R901	1-216-837-11	METAL CHIP	22K	5%	1/10W
R902	1-216-837-11	METAL CHIP	22K	5%	1/10W
R904	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R905	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R906	1-216-833-11	METAL CHIP	10K	5%	1/10W
R908	1-216-821-11	METAL CHIP	1K	5%	1/10W
R909	1-216-821-11	METAL CHIP	1K	5%	1/10W
R910	1-216-864-11	SHORT CHIP	0		
R911	1-216-864-11	SHORT CHIP	0		
		< RELAY >			
⚠RY901	1-755-334-11	RELAY, AC POWER			
		< TRANSFORMER >			
⚠T902	1-443-908-11	TRANSFORMER, POWER			
**********					
		VOLTAGE SELECTOR BOARD (CBX3: Singapore)			
		**********			
		< SWITCH >			
⚠S901	1-786-055-31	SELECTOR, VOLTAGE (VOLTAGE SELECTOR)			

REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2007.03	New
1.1	2007.04	Change of 5V REGULATOR, AMP, FRONT PANEL, HEADPHONE, REGULATOR, SPEAKER and TOP PANEL boards (Suffix-12) Change of MAIN and POWER boards (Suffix-12) (SUPPLEMENT-1) (ECN-ECC13274)
1.2	2007.05	Change of USB board (Suffix-12) Change of 5V REGULATOR, FRONT PANEL, HEADPHONE, REGULATOR and TOP PANEL boards (Suffix-13) Change of POWER board (Suffix-13) (SUPPLEMENT-1) Change of AMP, MAIN and SPEAKER boards (Suffix-13) (SUPPLEMENT-2) (ECN-ECC20021/ECC20245)
1.3	2007.06	Addition of Canadian, Australian, Singapore, Taiwan, Korean and UK (Gunmetallic type) models to HCD-CBX3 Addition of 5V REGULATOR, FRONT PANEL, HEADPHONE, REGULATOR and TOP PANEL boards (Suffix-23: for Singapore model) Addition of AMP, MAIN and SPEAKER boards (Suffix-23: for Singapore model) (SUPPLEMENT-2) Addition of POWER board (Suffix-23: for Singapore model) (SUPPLEMENT-3) Addition of VOLTAGE SELECTOR board (Singapore model only) (SUPPLEMENT-3)

SS-CBX1/CBX3/CBX5

SERVICE MANUAL

Ver. 1.5 2007.10

US Model
SS-CBX1/CBX5
Canadian Model
SS-CBX3/CBX5
AEP Model
UK Model
E Model
Australian Model
Chinese Model
SS-CBX3

Photo: SS-CBX1

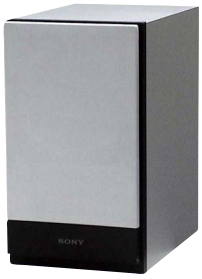

Photo: SS-CBX3 (PEARL SILVER)

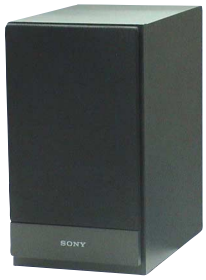

Photo: SS-CBX5

- SS-CBX1 is the speaker system in CMT-BX1.
- SS-CBX3 (PEARL SILVER) is speaker system in CMT-BX3/BX3R/BX7DAB.
- SS-CBX3 (GUNMETALLIC) is speaker system in CMT-BX3 (UK model)/BX4R.
- SS-CBX5 is the speaker system in CMT-BX5BT.

SPECIFICATIONS

Speaker system: Full Range 10 cm, cone type
Nominal impedance: 6 ohms
Dimensions (w/h/d):
140 × 245 × 135 mm (SS-CBX1)
140 × 245 × 210 mm (SS-CBX3/CBX5)
Mass:
Approx. 1.5 kg net per speaker (SS-CBX1)
Approx. 1.9 kg net per speaker (SS-CBX3/CBX5)

Design and specifications are subject to change without notice.

PARTS LIST

Part No.	Description	Remark
A-1229-907-A	OVERALL ASSY (PEARL SILVER) (SS-CBX3)	
A-1229-909-A	OVERALL ASSY (SS-CBX1)	
A-1239-107-A	OVERALL ASSY (SS-CBX5)	
A-1314-470-A	OVERALL ASSY (GUNMETALLIC) (SS-CBX3: UK, Mexican)	

Note: UK and Mexican models of SS-CBX3, there is two color type of PEARL SILVER and GUNMETALLIC.

SPEAKER SYSTEM

9-887-613-06
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Personal Audio Division
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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2007.03	New
1.1	2007.05	Addition of system model name (SS-CBX3 for CMT-BX7DAB)
1.2	2007.06	Addition of Canadian, Singapore, Taiwan, Korean and Australian models (SS-CBX3) Addition of E and Russian models (SS-CBX3 for CMT-BX3R) Addition of Gunmetallic type (UK model of SS-CBX3)
1.3	2007.07	Addition of system model name (SS-CBX3 for CMT-BX4R) (ENG-07006)
1.4	2007.08	Addition of Canadian model (SS-CBX5)
1.5	2007.10	Addition of Chinese model (SS-CBX3)